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SOUVENIR BOOK

OF THE

# Cleveland Industrial Exposition

JUNE 7-19, 1909



ISSUED BY THE

EXPOSITION COMMITTEE

THE CLEVELAND CHAMBER OF COMMERCE

1909

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CITY OF CLEVELAND

## FOREWORD

According to the Greek philosopher it is good for a man to know himself. If he benefits by knowing the physical body, is it not good for him to know the body corporate, the arteries of commerce, the sinews of trade?

The manufacturers who planned the Cleveland Industrial Exposition had this theory in view. They wanted Cleveland to know itself. They wanted Clevelanders to understand the message of stack, and hammer, and wheel, and to realize the extent and variety and quality of Cleveland-made products.

They hope that the fruition of their efforts will be both educational and entertaining, that it will strengthen local loyalty and still further extend our city's splendid fame.

June, 1909



## THE PROJECT



**T**HE Cleveland Industrial Exposition was suggested by Mr. F. F. Prentiss in December, 1908. The idea was submitted to a meeting of local manufacturers, called by President Charles S. Howe of The Cleveland Chamber of Commerce, December 9th. At this gathering the project was so warmly approved that the Chamber decided to hold an exposition of Cleveland-made products the coming year.

President Howe appointed an Exposition Committee of one hundred. From this number an Executive Committee was selected with the following members: Mr. Charles E. Adams, Mr. W. D. B. Alexander, Mr. Charles E. Farnsworth, Mr. S. P. Fenn, Mr. Munson A. Havens, Mr. William H. Hunt, Mr. H. A. Higgins, Mr. John G. Jennings, Mr. L. H. Kittredge, Mr. M. A. Marks, Mr. Harry New, Mr. Robert W. Ney, Mr. Charles A. Paine, Mr. S. L. Pierce, Mr. F. F. Prentiss, Mr. Willard N. Sawyer, Mr. W. D. Sayle, Mr. F. R. Scofield, Mr. Ambrose Swasey, Mr. Lyman H. Treadway. The officers chosen for both committees were: Mr. F. F. Prentiss, chairman; Mr. Charles E. Farnsworth, treasurer; Mr. William G. Rose, secretary. The details of the work were divided among six sub-committees: Halls and Headquarters, Publicity, Decoration, Entertainment, Transportation, Finance. Offices were opened in The Chamber of Commerce building, and the preparatory work began in January.

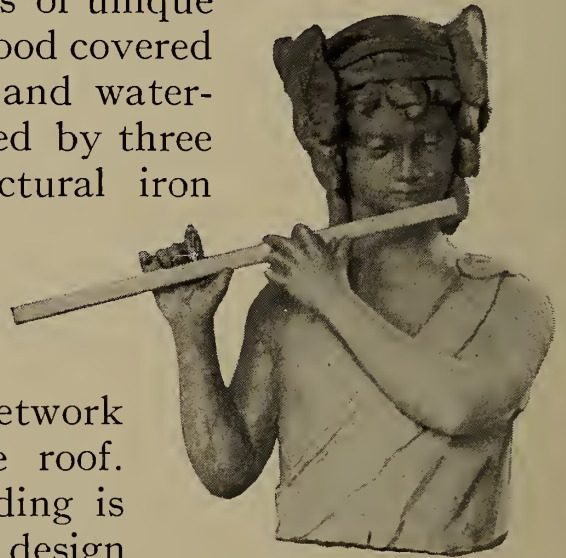
The Executive Committee found at an early date that the available public halls would not accommodate the prospective exhibitors. It was therefore decided that an exhibition building was necessary, and the Committee selected as a site the plat of ground upon which the coming city hall—a part of Cleveland's Group Plan—is to be erected. The land is nearly opposite the Central Armory, the use of which for exposition purposes was secured from the trustees.

A grant for the occupancy of the city hall site having been given by the city authorities, Mr. J. Milton Dyer was selected as the Committee's architect, and the erection of the building began on March 30th. On May 24th the structure was in readiness for the exhibitors.



DETAIL OF DECORATION

The Exposition Building, erected in forty-seven working days, has a larger ground floor exhibit area than any other exposition structure in the United States. Its total area is 72,030 square feet, and this added to the area of the armory and the bridge connecting the two buildings, gives a grand total of 114,656 square feet, a space greatly in excess of that of any previous home product exhibition. The new building is of unique construction. The walls are of wood covered with staff, and the fireproofed and water-proofed canvas roof is supported by three huge masts mounted on structural iron supports which are anchored to thirty-ton blocks of iron-weighted concrete. From these supports quarter-poles are extended, adding strength to the network of steel cables that holds the roof. At the west of the main building is a Pompeiian garden of novel design and with original features.



IN THE GARDEN

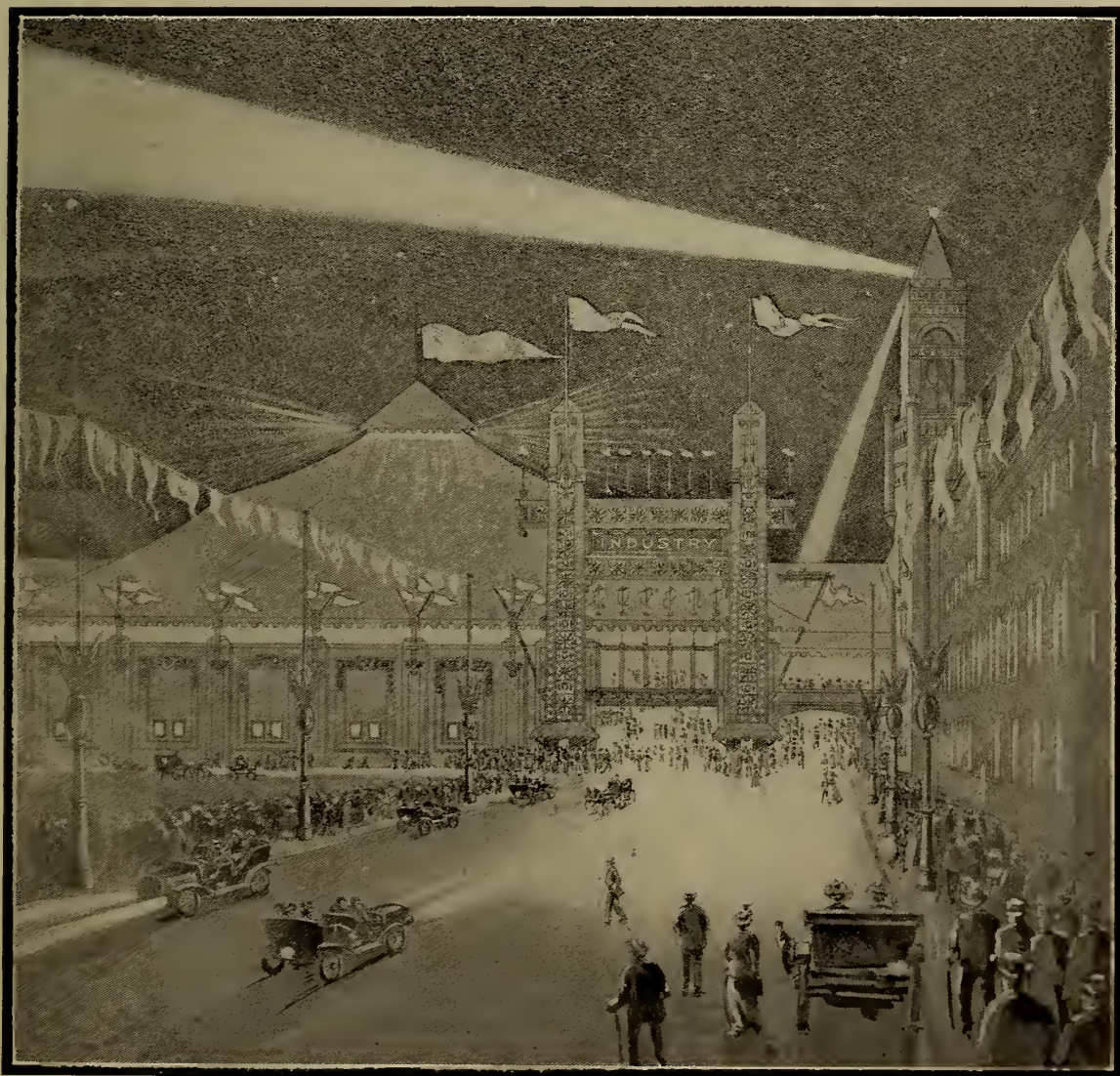
The Exposition decorative scheme includes the approach to the exhibition buildings, beginning at the intersection of Superior avenue and East 6th street, where two massive statues representing the "Spirit of Progress," designed by Architect J. Milton Dyer and executed by Sculptor Herman Matzen, stand on pedestals at either side of the roadway. More than twenty thousand electric lamps, aided by searchlights and other powerful illuminants, supply the lighting. The interior walls are covered with white bunting, relieved by adornments in harmony with the character of the Exposition, while fountains, statuary, flowers and shrubbery add to the general effect.



DECORATIVE PANEL

A notable supplementary feature of the Exposition is the elaborate street decorating scheme planned and executed by the Retail Merchants' Board, the lighting item alone requiring the use of fifteen thousand electric lamps.

The plans of the Executive Committee were outlined and plats and application blanks issued in March. Within a week enough favorable responses were received to guarantee the success of the project and to warrant the erection of the Exposition Building. The publicity campaign thereupon commenced. One million Exposition gum seals, more than 1700 monthly proof-sheets, 25,000 invitation booklets, and 100,000 postcards were printed and circulated; and 15,000 posters and window cards were distributed locally and through all cities and towns within a radius of 200 miles. A slogan competition drew out 3,000 participants, and a poster



THE EXPOSITION BUILDING

competition increased popular interest. A souvenir book of the Exposition, containing a directory of the exhibitors, a classified list of Cleveland manufacturers, and other matter pertaining to local industries, was prepared. The work of the publicity department was aided by favorable arrangements for transporting out-of-town visitors to the city during the Exposition period.

The entertainment material secured by the Committee included two of the best local bands; the famous boy chorus of 500, Mr. J. Powell Jones, director; and other features of a high-class character.

Throughout these arrangements the Committee has kept in view the primal object of exploiting the city by a comprehensive display of its manufacturing resources. The Exposition will draw attention to Cleveland's peculiar advantages as a manufacturing center, and it is believed this better understanding will materially add to the city's industrial prosperity. As a local exhibit the Exposition will be found educational as well as entertaining, and it is hoped it will win the approval of the Cleveland public both as an interesting exhibit and a commercial object lesson. In this connection the Committee is gratified to note that a number of American cities are preparing for home product expositions of the same general scope and purpose as our own.

With the conclusion of this hurried summary of the details of inception, construction, promotion and administration, that have brought the project to its opening hour, the preliminary chapter ends.

The Cleveland Industrial Exposition must now speak for itself.

June, 1909.



# THE ORGANIZATION

## EXECUTIVE COMMITTEE

F. F. PRENTISS, Chairman  
C. E. FARNSWORTH, Treasurer  
WILLIAM G. ROSE, Secretary

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Munson A. Havens  
M. A. Marks  
Willard M. Sawyer

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Harry New  
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F. R. Scofield

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S. P. Fenn  
Charles A. Paine

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W. D. Sayle

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Robert W. Ney

### FINANCE

F. F. Prentiss  
C. E. Farnsworth  
Munson A. Havens  
M. A. Marks  
Lyman H. Treadway

# EXPOSITION COMMITTEE

- |   |  |
|---|--|
| <p>F. F. PRENTISS, Chairman<br/>(The Cleveland Twist Drill Co.)</p> <p>C. E. FARNSWORTH, Treasurer<br/>(First National Bank)</p> <p>WILLIAM G. ROSE, Secretary<br/>(Cleveland Industrial Exposition)</p> <hr style="width: 20%; margin: 10px auto;"/> <p>CHARLES E. ADAMS<br/>(The Cleveland Hardware Co.)</p> <p>GEORGE D. ADAMS<br/>(The Cleveland-Akron Bag Co.)</p> <p>W. D. B. ALEXANDER<br/>(The National Screw &amp; Tack Co.)</p> <p>E. E. ALLYNE<br/>(The Allyne Brass Foundry Co.)</p> <p>H. G. ASHBROOK<br/>(The Glidden Varnish Co.)</p> <p>E. J. BAGNALL<br/>(The Adams-Bagnall Electric Co.)</p> <p>WALTER C. BAKER<br/>(The American Ball Bearing Co.)</p> <p>C. O. BARTLETT<br/>(The C. O. Bartlett &amp; Snow Co.)</p> <p>C. H. BEARDSLEE<br/>(The Cleveland Gas Light &amp; Coke Co.)</p> <p>K. D. BISHOP<br/>(The Bishop &amp; Babcock Co.)</p> <p>M. A. BLACK<br/>(The H. Black Co.)</p> <p>H. J. BOGGIS<br/>(The Taylor &amp; Boggis Foundry Co.)</p> <p>HENRY BORN<br/>(The Born Steel Range Co.)</p> <p>N. P. BOWLER<br/>(The Bowler Foundry Co.)</p> <p>J. C. BRAINARD<br/>(The Johnston &amp; Jennings Co.)</p> <p>CHARLES S. BROOKINS<br/>(The Morreau Gas Fixture Mfg. Co.)</p> <p>T. H. BROOKS<br/>(T. H. Brooks &amp; Co.)</p> <p>W. C. BRUCE<br/>(The Bruce-Meriam-Abbott Co.)</p> <p>F. F. BRUCE<br/>(The Bruce &amp; West Mfg. Co.)</p> <p>F. W. BRUCH<br/>(The Acme Machinery Co.)</p> <p>ANTHONY CARLIN<br/>(The Standard Foundry &amp; Mfg. Co.)</p> <p>DAVID J. CHAMPION<br/>(The Champion Rivet Co.)</p> | <p>N. D. CHAPIN<br/>(The Billings-Chapin Co.)</p> <p>F. A. COLEMAN<br/>(The J. D. Smith Fdy. Supply Co.)</p> <p>GEORGE P. COMEY, Jr.<br/>(The Comey &amp; Johnson Co.)</p> <p>HENRY W. CORNING<br/>(The Standard Sewing Machine Co.)</p> <p>J. S. CRIDER<br/>(National Carbon Co.)</p> <p>D. EDWARD DANGLER<br/>(The Dangler Stove Co.)</p> <p>C. T. DRAPER<br/>(The American Can Co.)</p> <p>F. E. DRURY<br/>(The Cleveland Foundry Co.)</p> <p>N. I. DRYFOOS<br/>(The National Woolen Co.)</p> <p>A. W. ELLENBERGER<br/>(The Worden Tool Co.)</p> <p>GEORGE J. FEISS<br/>(The Superior Foundry Co.)</p> <p>PAUL L. FEISS<br/>(The Joseph &amp; Feiss Co.)</p> <p>S. P. FENN<br/>(The Sherwin-Williams Co.)</p> <p>WILLIAM B. FISH<br/>(The Printz-Biederman Co.)</p> <p>HARLEY B. GIBBS<br/>(The King Bridge Co.)</p> <p>W. S. GORTON<br/>(The Standard Welding Co.)</p> <p>T. S. GRASSELLI<br/>(The Grasselli Chemical Co.)</p> <p>WILLIAM GREIF<br/>(The Greif Brothers Co.)</p> <p>R. A. HARMAN<br/>(Cleveland City Forge &amp; Iron Co.)</p> <p>MUNSON A. HAVENS<br/>(The Cleveland Chamber of Commerce)</p> <p>A. W. HENN<br/>(The National-Acme Mfg. Co.)</p> <p>H. A. HIGGINS<br/>(The Standard Tool Co.)</p> <p>WILLIAM H. HUNT<br/>(Hydraulic-Press Brick Co.)</p> <p>W. H. HYDE<br/>(The Abner Royce Co.)</p> <p>D. R. JAMES<br/>(The Empire Rolling Mill Co.)</p> <p>JOHN G. JENNINGS<br/>(The Lamson &amp; Sessions Co.)</p> |
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- WINDSOR T. WHITE  
(The White Co.)
- ALEXANDER WINTON  
(The Winton Motor Carriage Co.)
- MORRIS J. WOLF  
(Prince-Wolf & Co.)

# CLEVELAND

1796-1909

*Born of the pathfinder's daring,  
Godly and thrifty his clan,  
Deep through the wilderness faring,  
Blazing his way in the van;  
Forest and thicket surrounding,  
Here by the freshwater sea,  
Fortune smiled down on thy founding,  
Town of a million to be!*

*Low on this rock of foundation  
Budded the flower of thy name;  
Now all the winds of creation  
Carry and scatter its fame.  
Toilers from distant lands drifting,  
Seeking the land of the free,  
Helped in thy mighty uplifting,  
Town of a million to be!*

*Countless the wheels thou art turning,  
Moving the tumbrels of trade,  
Countless the furnace fires burning,  
Countless the ships thou hast made.  
Progress, knit in with thy story,  
Mistress of lake and of lea,  
Voices the hymn of thy glory,  
Town of a million to be!*

June, 1909

W. R. Rose.



# A CENTURY OF INDUSTRY

## I



**M**IDWAY between the river and that reserved square of land which has become the heart of Cleveland, on the south side of what is now Superior avenue, stood the original manufacturing plant of the future metropolis of Ohio. It was the blacksmith shop of Pioneer Nathaniel Doan, and its site was given the worthy smith by the Connecticut Land Company in acknowledgment of the value of his services. The shop, a rude log structure, was built in the summer of 1798, the year Pioneer Doan arrived in Cleveland, and there the sturdy artisan shod infrequent pack horses, and fashioned

such handy tools as his skill and materials would permit. The blacksmith was a popular man in that limited community, and the pleasant clink of his hammer and the dull glow of his forge, made the modest smithy a pleasant loitering place for local gossips and passing wayfarers.

In 1800, Pioneer Wheeler W. Williams built a grist and saw mill on what was later called Mill creek, in the town of Newburgh, and the building of this establishment developed still another form of industrial production when Pioneer David Bryant, and his son Gilman, cut and shaped the mill stones in a rude and laborious fashion. A little later this mill passed into the hands of Judge Samuel Huntington, a pioneer of much more than local fame.

In 1801, David Bryant set up in a log building under the hill, near the foot of Lakeside avenue, a diminutive copper still which he brought with him from Virginia. This tiny distillery had a daily capacity of two quarts of raw spirits, and it is credited in the early annals with adding a zest to the social gatherings, and with exerting a mollifying influence over the uneasy Indians of the neighborhood.

In 1808, Cleveland's original ship-builder, that fearless foreloper, Lorenzo Carter, built the schooner "Zephyr," of thirty tons, and a little later Joel Thorpe launched the "Sally," and Alexander Simpson the "Dove," tiny boats of equal tonnage. These vessels were the white winged couriers of the mighty Cleveland fleet that was to follow. In 1814, another stalwart pioneer, Levi Johnson, built the "Pilot," a pretentious schooner of sixty tons, of which it is related that twelve yoke of oxen were required to drag the reluctant craft from the Johnson boatyard to the river, a half mile away. With the construction of the "Pilot" shipbuilding assumed and held the paramount place among Cleveland industries for a half century to come.

These industrial beginnings in the new foothold in the Reserve wilderness present in an interesting sequence the necessities and resources of a primitive settlement. The artisan in iron, the maker of tools, led the way. Then came the grinder of grain and the worker in wood. They were followed by the alchemist who could charm from the bearded wheat the fiery liquid that was both used and abused. After these came the builder of boats.

## II

In 1820, Cleveland had a population of nearly 500, a weekly newspaper, a duly authorized court, a bank, a half dozen established streets, two tanneries, two blacksmith shops and several boat builders. The village was overlapping that first clearing in the wilderness, and new experiences and responsibilities were testing the sturdy community. The settlers had caught the war spirit in 1812, and later had heard the far away guns of Perry's fleet. They had held their first village election in 1815 and cast twelve votes. They had seen the Walk-in-the-Water, the earliest steamboat on the lakes, push its way across the harbor bar. With this accession of experience came a demand for extended commercial opportunities. An appeal was made for the improvement of the river channel, an appeal which—with slight variations and brief cessations—has never been permitted to die out. The channel of that early day was in a deplorable condition. Vessels were warped over the sandy bar at the river



CHAMBER OF COMMERCE

mouth with anchor and windlass. There were no sheltering piers, no channel markings.

In 1818, an industry which was to exert a marked influence in the community, voicing its needs and demanding its rights, had been inaugurated with the first number of "The Cleveland Gazette and Commercial Register." The newcomer was cradled in a 10x12 structure on lower Superior street, and its editor, publisher and entire staff, was Andrew Logan—to whom

due honor be given. A local bard has thus embalmed this pioneer weekly and its resolute and fearless promoter:

"Its circulation wasn't great,  
The editor grew gaunt;  
And yet despite a frowning fate  
It filled a long felt want."

In 1816, the villagers had attempted to push a protecting pier into the lake near the inhospitable sand bar. Old Erie deliberately tore this puny structure to pieces and flung the fragments along the beach. In 1817, the villagers held a public meeting and demanded a deeper channel and a breakwater. Finally, that energetic lawmaker, Congressman Whittlesey, secured a federal appropriation for improving the Cuyahoga. It was but \$5,000, afterwards increased to \$10,000, but with the beginning of the work on October 27, 1827, a new commercial era for Cleveland had its beginning too.

Another potent factor in advancing the progress of the village was the Ohio Canal, commenced July 4, 1825, and finished in 1827, the first boat reaching Cleveland amid much rejoicing on July 7 of the latter year. Still another water-



EUCLID AVENUE

way aided with more or less directness in developing the commercial welfare of the village. This was the Erie canal, completed on October 27, 1825. It was by the Ohio canal that the first coal reached the village. The precious fuel, at that time but little appreciated,

came from the Massillon field in small quantities, and was used by the local blacksmiths.

In 1827, the first industrial plant in Cuyahoga county really worthy of the name of manufactory, was started in a workshop near the corner of River and Washington streets, in the village of Brooklyn, afterwards Ohio City, and still later Cleveland's West Side. In 1834 this modest establishment was incorporated under the name of The Cuyahoga Steam Furnace. Its output was cast and wrought iron work, the pig iron used being obtained from the company's blast furnace at Dover, twelve miles west of the village, the company assuring the public that this material was equal to the best Scotch pig. Undaunted by a disastrous fire which swept away the old shop, the company erected a pretentious building, where in 1836 it is reported to have produced "more than 500 tons of castings, besides a large quantity of wrought iron, giving employment to seventy men."

### III

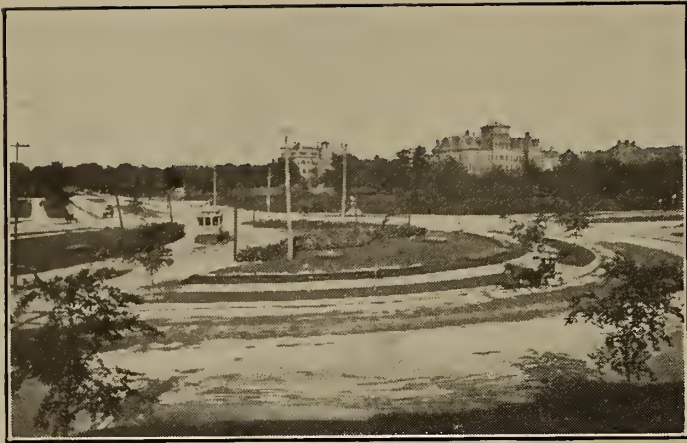
In 1836, the birth year of both the city of Cleveland and Ohio City, the former, with a population of possibly 6,000, was credited with "four very extensive iron foundries and steam engine manufactories, three soap and candle factories, two breweries, one sash factory, two rope walks, one stone-ware pottery, two carriage shops, and two French burr millstone manufactories—all in full operation." It may be safely assumed, however, that these vaunted establishments

were woefully diminutive in both size and output, and that their extensive character was very largely a pleasing figment born of acute local pride.

In 1834 the little community watched the efforts of certain courageous Clevelanders who were determined to construct a railroad within the county limits. The Cleveland & Newburgh Railroad was the result of their pertinacity, a strap rail system, four miles long and all under one management. It connected the Public Square with a stone quarry in Newburgh township, and was used nearly four years amid discouraging surroundings and then abandoned. The railway agitation was continued, however. Several lines, extending east, west and south, were laid out on paper and their advantages duly and eloquently chronicled. In 1834 the Legislature incorporated no less than six railway companies controlled—with one exception—by Clevelanders, and all designed to materially benefit the village. Only one of these projects materialized—the Ohio Railroad Company, familiarly known as the “stilt road,” because its tracks were laid on piles. This chimerical line was partially constructed westward from Ohio City, but never reached the operating stage, collapsing entirely in 1845 and leaving behind heavy liabilities and long lines of decaying piles as monuments to the folly of the scheme. In 1837 the Legislature incorporated the Lake Shore Railway Company, whose line, it was popularly understood, would prove a powerful adjunct



WHERE IRON MEETS COAL



UNIVERSITY CIRCLE

in protecting the lake front from the encroachment of the waves.

In 1837 came the nation's first period of financial depression. Cleveland suffered severely. The bubble of inflation broke, and fondest hopes were

wrecked. Times continued unfavorable, credit was elusive, improvements halted, manufacturing industries were paralyzed. It was not until a decade later that the building of the eagerly-anticipated and long delayed railroads was actually under way. The financial clouds were disappearing, and with clearer skies the times rapidly improved. It was not the railroads alone that drew the awakening attention of the citizens. The Briar Hill coal mines were opened up in 1845, and their product came to the city in rapidly increasing quantities. Shipbuilding showed a marked improvement. During the three years ending September 1, 1845, twenty-six vessels were launched from local boat yards. In the previous year a discovery was made that proved of paramount importance to the city. This was the finding of iron ore in the Lake Superior region in 1844, but the metal was largely isolated through lack of shipping facilities and inconvenience of handling, and there was no local demand for it. The brisk factories of 1836 had vanished in their own smoke, and seventeen years later a citizen of the day chronicles the fact that there was but one iron manufactory in all Cleveland, the Renton foundry on the lake shore. In 1847 the Lake Erie Telegraph Company was permitted to run its wires through the city, and on Septem-



LAKE SHORE DRIVE



CENTRAL ARMORY

ber 15 of that year, the first telegraph office was opened. On July 7, 1848, the Cleveland Board of Trade was founded, an organization that represented the best element of citizenship and exerted a healthful influence upon the slow-paced industrial and commercial progress of the day. On December 16, 1849, the citizens welcomed an industry which promised greater direct benefit than any which the city had hitherto known. This was artificial gas. The smoky municipal lamps were banished from the down town streets and the new illuminant took their place. No doubt there were Clevelanders blest with sufficient imagination to find in this glowing finish to the half century a pleasing promise of brighter and better days.

#### IV

Scarcely had the municipality with its 17,034 souls started around the corner into the last half of the century, when the city officials, on March 16, 1850, enjoyed a ride over the first completed section of that new industrial highway, the Cleveland, Columbus & Cincinnati railroad. The locomotive that drew the special car containing the guests

and officials was "The Cleveland," and it covered fifteen miles in twenty-seven minutes. It is pleasing to note that this interesting jaunt was followed by a banquet at the city's leading hotel, and that the locomotive was referred to as the only motive that could induce a man to leave Cleveland. The industrial output of the city must have been lightly regarded, however, if we may judge by the statement that the toast "The Infant Manufactories of Cleveland" was facetiously referred to the city father whose business was that of a nurseryman.

Another new highway of transportation, that proved of scarcely less importance to industrial Cleveland than the railroads, was the Sault Canal. This great artificial strait was completed May 19, 1855, closely following the eventful period that brought the city into rail communication with the outside world. The wide-spread benefits conferred by this remarkable waterway, its development of new enter-



"AMERICAN COMMERCE"

Federal Building—Daniel Chester French, Sculptor

prises, its mighty aid to national progress, cannot be computed. Cleveland was not prepared to comprehend its mission. Later on, when the coal supply increased—fifty tons a week had been considered a fair output for the Briar Hill mines—and transportation facilities improved, manufacturers began to realize the advantages of this natural meeting place of the two great factors of industrial energy, iron and coal.





TRINITY CATHEDRAL

In 1853 the first iron ore from the Lake Superior mines of the Cleveland & Marquette Iron Mining Company, a part of a schooner's cargo, reached the city in barrels, and attracted much attention by its novel appearance. At this time the manufacturing interests of

the city were centered about a copper smelting works, a rolling mill and a car factory, all of small resources and limited output.

In 1852, the Cleveland, Painesville & Ashtabula Railroad was opened for traffic and travel, the Cleveland & Pittsburg line was in operation, and in January, 1853, the line from Cleveland to Norwalk and Toledo was completed. In the same year the construction of the Cleveland & Mahoning Railroad was begun, but the project moved slowly and it was 1856 before the road reached Youngstown. On February 1, 1854, the first through-without-change train from Buffalo reached the city. Here were sudden riches in transportation for the comparatively isolated little community, but Cleveland was still a commercial city and her natural highway of trade was the lake. The shipyards along the Cuyahoga continued

busy. In 1856, twelve propellers and twenty-one other vessels were built there. In October, 1856, all Cleveland was interested in the famous voyage of the ship "Dean Richmond" from Chicago to Liverpool, the vessel being the product of a Cleveland shipyard. On May 29, 1858, the citizens were



UNION CLUB

aroused by the departure of the so-called "Liverpool fleet," four vessels built in Cleveland yards and owned by Cleveland men. The city officials and a detachment of artillery men gave the argosy a noisy bon voyage. One of the ships was loaded with wheat, the others carried cargoes of black walnut lumber. All arrived safely in Liverpool, and were believed to have inaugurated a brisk direct trade with the English market. Local interest was closely entwined with the shipping. So much so, in fact, that the movements of a single steamer were impressively chronicled. For instance, the arrival in port May 11, 1859, of the steamer "Northern Light," a noted boat in its day, with 215 tons of copper from Lake Superior, was made the subject of extended notice.



THE CUYAHOGA

Notwithstanding its industrial slowness, the city was steadily developing along other lines. In June, 1852, Cleveland's first iron bridge was erected across the canal at Merwin street. It was the city's initial example of advanced engineering work, and naturally drew much attention. The structure was 66 feet in width with 36 feet span and had three roadways—evidently a notable model of constructive skill. On June 25, 1853, the city received and entertained a large party of southern and western business men, its first visit from an out-of-town commercial body. On December 22, 1854, two hundred Philadelphians inspected the city, and were entertained at dinner by one hundred prominent Clevelanders, the general impression being that both the city's

fame and commercial welfare were increased by this pleasant gathering. In 1856 the city water works system was in operation, bringing an improvement that had been agitated for twenty-five years. Cleveland's footsteps were making imprints on the highway of metropolitan distinction.



TECHNICAL HIGH SCHOOL

As an example of the prophetic spirit that was beginning to animate the citizens, the proposition submitted to the city council in August, 1855, by Citizen D. J. Garrett, may be cited. Citizen Garrett asked the city fathers to favor his plan for a breakwater. The Garrett plan included tight crib work, filled with stone and emerging six feet above the water. This was to begin at the outer end of the stone pier at the mouth of the river, and run parallel to the shore eastward, a thousand feet out, in fifteen feet of water, to a point opposite Wood street, or the Marine Hospital. Citizen Garrett's mind was of the prophetic sort, but while his plan was admired and approved by the councilmen, and was submitted to the attention of the district's Congressman, it received no practical encouragement. Another project manifestly ahead of its time, a project which might have altered the entire industrial history of the city, as well as the topography of its manufacturing section, was broached at a meeting of the council on July 22, 1856. It took the form

of a resolution that contemplated the construction of a tunnel, or subway, under the city from the lake shore to the extreme southern limit of the municipality. It was intended primarily for the use of the railroads centering in Cleveland, and by its



EUCLID CLUB



THE HEART OF CLEVELAND

adoption all the vexing problems concerning rights-of-way, and grade crossings, and riparian rights, would have been eliminated. But the councilmen, not being gifted with the prophetic instinct, quickly shelved the daring scheme. It was in 1859 that the first attempts were made to refine coal oil, the fuel used being cannel coal. With these early experiments, crude and slow, a new factor was added to the great sources of the city's manufacturing progress—the trio being iron, coal, oil.

A classification of the manufacturing plants in the Cleveland of fifty years ago has some degree of interest, although it is of little value as a means of comparison. Of boat builders there were three; box makers, three; brewers, nine; bridge builders, one; car builders, four; carriage and wagon makers, twenty-one; engine and machinery manufacturers, five; founders, four; hardware makers, six; melodeon makers, two; oil refiners, two; planing mills, five; ship builders, seven; soap and candle makers, ten. A local publication



MONUMENTAL PARK

computed the number of manufacturers in the city in 1859 at 165, classified and miscellaneous, great and small—with none really great, and nearly all small—a computation that is now chiefly interesting because it indicated the coming of a new civic era.

This array of industrial plants indicates to a degree the survival of primitive demands along manufacturing lines—demands for tools and building material and actual necessities. As a sociological study the list is interesting.

With the dawn of 1861, the romance of Cleveland's industrial beginnings ended. The story of those early efforts to secure a foothold, the pathetic struggles of the pioneer artisans—hampered by crudest materials, handicapped by lack of transportation, discouraged by the poverty of the market—was a closed chapter. It was followed by a happier period, a period of rapid growth, of solid foundations, of facts and figures and startling comparisons, a period of steadily increasing industrial progress and civic fame.



SECOND PRIZE POSTER—H. P. COOK

Dark clouds hung low and the air was filled with disquieting rumors when the new decade dawned upon Cleveland and the nation. The civil strife drew heavily from the ranks of the city's most active and useful residents. It was a period of uncertainty. Invested capital was beset with fears. The finances of the north rested upon a foundation of faith and loyalty alone. Yet, strange to say, in spite of the anxiety and doubt of those bitter years, in spite of the weakening drains of the long struggle, the city gained rapidly in both wealth and population, doubling the latter in the decade, and what was still more remarkable, its municipal distinction and classification changed.

At the beginning of the war Cleveland was a commercial city; at the close of the struggle it was a manufacturing one.

There were three active causes that contributed to this change. The facilities for handling the Lake Superior ores greatly improved; the proximity of the Ohio coal fields, and in a minor degree of the Pennsylvania and West Virginia fields, made the Cleveland port the natural and logical one for manufacturers and shippers; and a shrewd and farsighted policy turned the early streams of the Pennsylvania oil wells toward Cleveland, and made the city the cradle of one of the world's leading industries.

In 1861 the refining of coal oil had become an established business of increasing proportions and glittering possibilities. In 1864 there were thirty refineries in the city, most of them scattered through the Cuyahoga Valley. In 1865 the amount of the crude material received in the city was 220,000 barrels. In 1866 the receipts reached 613,247 barrels, and the shipments of the refined product 402,430

barrels. New transportation facilities from the oil territory were established. In the summer of 1869 Cleveland was flavored and saturated with oil. Its odor was in the air, its taste was in the water. It smeared the river and the lake; its smoke hung over the city like a greasy pall. Oil wagons rumbled through the streets, oil tanks blocked the railways. Oil fires kept the city firemen eternally vigilant and filled the valley with painful apprehension. The oil market was the prime subject of conversation. In short, it was the hour of oil, and Cleveland was the oleaginous headquarters. In 1870 a careful estimate showed that more than one-third of the entire product of the oil producing region had come to the Cleveland refineries. During the period from 1865 to 1870 inclusive, the total amount of crude oil received in Cleveland was 5,585,226 barrels, and the product shipped was 4,212,819 barrels—truly a mighty sea.

The Clevelanders of the early 60's were not lacking either in patriotism or enterprise. In the summer of 1862 an attempt was made to secure the establishment of a national foundry in the city. A public meeting was called and a committee of prominent citizens appointed to urge the advantages of a local site for the desired plant, but for reasons not understood the project came to naught. A little later the citizens endeavored to secure a proposed navy yard on the lakes, but this effort followed the federal foundry failure, and two great industrial plants were lost to the city. The disappointment was tempered however when it was found that neither project was carried out by the federal authorities.



THIRD PRIZE POSTER—F. RAY WALKER



ROCKEFELLER PARK

double the amount received in 1865. Of the receipts in 1870 the local consumers used 411,610 tons. Much of the Massillon coal was still brought to the city by canal, and increased transportation facilities were imperatively demanded.

In 1870 the total production of the Lake Superior iron mines was 859,507 tons and of this amount considerably more than one-half was consumed in Cleveland. The product had increased from 114,401 tons in 1860 to 247,059 tons in 1864—virtually all of this amount coming to Cleveland. Later on the product found new markets, but Cleveland remained the great central receiving port.

The industrial changes during the decade, shown by the census of manufacturers taken in 1870, are highly interesting. It was a period of strange transitions. The population more than doubled, from 43,419 in 1860 to 92,829 in 1870, while the number of manufacturing establishments increased nearly seven-fold; the manufacturing of iron had become a permanent industry; in oil refining Cleveland led the nation. According to the 1870 census there were 1149 manufacturing establishments in Cuyahoga County, practically all of them



EUCLID BEACH

The local coal trade may be taken as a barometer of early industrial conditions. The receipts of coal in Cleveland in 1865 exceeded the receipts in 1860 three-fold. In 1870, they were 894,000 tons, nearly

within the city limits. There were thirty-eight incorporated companies with an aggregate capital of \$11,690,000. There was \$13,645,018 invested in manufacturing plants; the hands employed numbered 10,063; the wages paid aggregated \$4,539,065;



the value of materials was \$16,861,357; the value of products, \$27,049,012. In these plants 274 steam engines of 9,388 horse power were used, and there were 55 water wheels with 2,179 horse power.

The classified list of manufacturers in business in 1870 exhibits a number of interesting developments. There were 67 manufacturers of iron of varied classes, with an aggregate capital of \$4,682,050, and the value of the products was \$6,497,579. There were sixteen oil refineries with \$520,000 capital and an output valued at \$4,283,065. There were thirteen flour mills that turned out products valued at



SUPERIOR VIADUCT

\$1,903,155; four pork packers, \$1,195,570; sixty-three coopers, \$1,051,785. In all, there are fifty-four classifications in the census of 1870, and among the comparatively new industries named are: clothing with 77 manufacturers and an output valued at \$588,389; furniture, 29 manufacturers and \$505,975 output; paints, four manufacturers and \$244,400 output; sewing machines, two manufacturers and \$290,000 output. Each of these industrial acquisitions was to greatly increase later on.

The decade 1861-1870 was Cleveland's decade of industrial transition. It was followed by a period of steady and substantial development.

## VI

The decade from 1870 to 1880 was marred by a period of financial depression that affected the entire nation and had a strong retarding influence upon all the city's activities. Values had been inflated, investments were too speculative. The crash that followed left effects that were overcome by slow degrees. There were labor troubles, too, of a severe and depressing character, troubles that were calculated to make capital uneasy and cautious. Yet the city continued its steady advance.

An important addition to Cleveland's iron industry had been established in September, 1868, when the first Bessemer steel was produced by the Newburgh rolling mills, the original Bessemer mill having a capacity of from 50 to 60 tons of steel ingots a day. Another innovation was the construction of the first iron steamer on the lakes, the "J. K. White," a small pleasure boat built in the summer of the same year that brought the inauguration of the Bessemer process.

The new steel was put to an entirely original use when on the morning of July 4th, 1876, the centennial year, a flag-staff of steel, the gift to the city of Ironmaster Henry Chisholm, of the Cleveland Rolling Mill Company, was dedicated with appropriate ceremonies.

In the same year one of the most important and useful inventions of the age was perfected by Citizen Charles F. Brush, the Brush electric light, which was given its first public demonstration on January 26, 1877. Later the Public Square and several downtown sections were lighted by the new illuminant, and its production gave the city a great industrial plant.

The city's railway connections were expanding, but transportation facilities scarcely kept pace with the growing demands. In 1863 the first train arrived over the line of the Atlantic & Great Western Railway, lessee of the Cleveland & Mahoning Railroad, the new company opening up a territory rich in industrial material. In 1867 the Buffalo & Erie, Cleveland, Painesville & Ashtabula, Cleveland & Toledo, Michigan Southern & Northern Indiana lines were united in that great trunk line, The Lake Shore & Michigan Southern Railway, the main office being located in Cleveland. In 1879 important new territory was opened up by the Valley

Railway and later by the Connotton Valley Railway, both with Cleveland terminals.

In 1878 an improvement that added greatly to the industrial welfare of the city, an improvement that was the fruit of long agitation and vigorous opposition, and that necessitated the greatest municipal outlay Cleveland had known, was completed amid popular rejoicing. This was the Superior Viaduct.

The first suggestion of a high level bridge over the Cuyahoga river was made in the columns of the Cleveland Daily Advertiser, November 17, 1836. When the arrangements were made for the union of Cleveland and Ohio City in 1854, one of the articles of agreement specified the building of a pretentious bridge at the foot of Superior street, but it was not until February, 1869, that a practical agitation for a high level structure began. Nearly ten years later, on December 27, 1878, the Viaduct was dedicated.

The government census of 1880 was the first to include special reports for the principal industries.

It also gave a close estimate of the changes brought by the decade in industrial totals. In the number of establishments, enumerated according to a perfected system, the gain of 1880 over 1870 was but .07 per cent.; the gain in capital was 31.7 per cent.; the gain in the number of wage earners 33 per cent.; the gain in the value of products was 26.9 per cent.



SPIRIT OF PROGRESS--MODELED BY HERMAN N. MATZEN AFTER DESIGN BY J. MILTON DYER



IN THE CHANNEL

The number of local manufacturing establishments in 1880 was 1,055, and the city ranked fifteenth in manufacturing in the United States. The capital employed was \$19,430,989; wage earners 21,724; wages paid \$8,502,935; cost of materials \$31,629,737; value of products \$48,604,050. The popu-

lation was 160,146, and both this increase and that in manufacturers were looked upon as highly satisfactory.

The 1881-1890 decade opened in an auspicious manner. New industries rapidly arose and old ones expanded. In 1883 the increase was especially noticeable, and the words of a local seer of the Cleveland of 1857 were recalled. This prophet had written in that day of little things: "Manufacturing establishments of various kinds are increasing, and the day is not far distant when Cleveland will be as celebrated for its manufactures, for the skill and ingenuity of its artisans, for the extent and variety of the products of its forges and furnaces and shops, as for the beauty of its location."

Disastrous fires of unusual magnitude marked the decade. Floods and labor troubles affected the welfare of the manufacturing section. Even an earthquake brought momentary alarm. In these respects it was an eventful period. But it brought no disaster that could not be overcome; no damage that could not be repaired.

On October 23, 1882, a new trunk line added to the city's transportation facilities. This was the New York, Chicago & St. Louis Railway, with headquarters in Cleveland. Earlier in the same year the first iron steamer of a large type for the Great Lakes trade, the "Onoko," was launched from a Cleveland shipyard.

In 1889 an effort was made to enlist local interest in the project of a permanent industrial exposition. The matter was taken up by the Board of Industry, and on December 7th of that year the special committee that had the project

under consideration, strongly recommended it, and suggested as a suitable site the lake front at the foot of Wood street, where it was thought sufficient made land could be secured by filling in the section desired. But the scheme appears to have died of inanition.

The federal census of manufacturers taken in 1890, showed a highly gratifying gain over that of 1880. The number of establishments increased 40 per cent.; the capital increased 13.39 per cent.; the wage earners increased 55.6 per cent.; value of products increased 74.5 per cent.

The decade between 1890 and 1900 was marred by a period of financial stringency, but Cleveland suffered in a less degree than many other municipalities, and local industries were only temporarily retarded. The period was marked by the rapid growth of certain lines of established industries, and the birth of new ones that were destined to become highly important. In July, 1896, a motor wagon appeared upon the local streets, an automobile in its earliest experimental stage. On May 24th, 1898, the first American-made automobile, a Cleveland product, found a purchaser. In 1900 there were six local makers of automobiles in the city, and a remarkable industry was established, an industry in which Cleveland was to rank first in the value of its products.

Certain fragmentary statistics which concern Cleveland's industrial progress during the decade will be found interesting. In 1899 the receipts of coal were 5,544,000 tons; nearly three times the amount received in 1890. The receipts of iron ore in 1899 were 3,376,000 tons; in 1892 they were 1,950,000 tons.

In shipbuilding in 1900, Cleveland led all other American cities in the production of merchant vessels, as well as in total tonnage.

In manufactured textiles, especially in the making of cloaks,



THE BOULEVARDS

and women and children's clothing, Cleveland was far in the lead of all other cities, with the single exception of New York.

The city led, too, in the production of wire and wire nails, of malleable iron, of twist drills, of high-class gasoline, steam and electric automobiles. It was well to the front in the manufacture of hardware, of paints and varnishes, of electrical apparatus, of bridges, of printing presses, of druggists' preparations, of car wheels, of chemicals, of sewing machines, of bolts, nuts, washers and rivets, of astronomical instruments.

The federal statistics of manufactures of 1900 gave the following results: Number of establishments 2,927; capital \$98,303,682; wage earners 58,810; wages \$27,892,689; value of products \$139,849,806. In ten years the number of establishments had increased 44.1 per cent.; the amount of capital doubled; the number of wage earners increased 24.9 per cent.; the value of products 38.8 per cent.

On March 6, 1902, Congress directed the taking of a census of manufacturers in 1905, and every ten years thereafter, according to the "factory system." This system is explained in the act itself, which provides: "That in the year 1905, and every ten years thereafter, there shall be a collection of the statistics of manufactures confined to manufacturing establishments conducted under what is known as the factory system, exclusive of the so-called neighborhood and mechanical industries." The act further specifies that the census shall be "Confined to the operation of factories, a factory being an association of separate occupations conducted in one establishment in order to



THE FREIGHTER



CENTRAL VIADUCT

facilitate the combination of the processes into which most branches of manufactures are divided.”

The factory system of 1905 gave Cleveland the following totals: Number of establishments 1,617; capital \$156,509,252; wage earners 64,095; wages paid \$33,471,513; cost of materials \$97,701,529; value of products \$172,115,101.

In accordance with the new system 59.5 per cent. of establishments enumerated in 1900 were omitted in 1905, as were 11.2 per cent. of wage earners, and 12.3 per cent. of value of products.

Basing the estimate of increase on statistics furnished by the census bureau, and using the federal system of computation, the industrial totals for Cleveland for the fiscal year ending June 30, 1909, can be assumed to be as follows: number of establishments 3,148; capital \$171,539,925;

wage earners 75,855; wages paid \$42,906,848; cost of materials \$100,778,813; value of products \$211,489,753.

In 1900 Cleveland ranked seventh in population and ninth in manufacturing. In 1905 the city's manufacturing rank rose to



STANDARD OIL TANKS

sixth—following in the wake of Boston and not far behind.

In 1909 Cleveland is the seventh city in population, the fifth in manufacturing in the United States, the ninth in the world, and the first in civic pride!

The following chronology of the principal industrial and commercial events that have marked the rise and progress of Cleveland, may be found a convenient medium of reference as well as an interesting sequence:

1796 July 22—Gen. Moses Cleaveland and his party of surveyors reached the Cuyahoga river.

1798 August 4—Cleveland's first industrial plant, the Doan blacksmith shop, was in operation.

- 1799 September 4—Cleveland's first grist mill began grinding.
- 1801 September 19—David Bryant set up a still he had brought from Virginia.
- 1810 March 29—Elias Cozad began the construction of a tannery.
- 1814 September 19—Levi Johnson's schooner "Pilot" was launched. This was Cleveland's first pretentious vessel.  
December 23—The village of Cleveland was incorporated.
- 1817 April 23—The "Walk-in-the-Water," the first steamboat on the lakes, entered the Cuyahoga.
- 1818 July 31—The Cleveland Gazette and Commercial Register appeared.
- 1825 July 4—Ground was broken for the Ohio canal.
- 1826 December 1—Citizens met and demanded harbor improvements.
- 1827 July 7—The Ohio canal was formally opened.  
September 13—The first ton of coal reached Cleveland.  
October 27—The government began the improvement of the river channel.
- 1834 March 3—The Cleveland & Newburgh Railroad Company was authorized by Legislature. It was four miles long and was abandoned after four years.  
November 17—The first suggestion of a high level bridge over the Cuyahoga river was made in the Cleveland Daily Advertiser.
- 1836 March 5—Cleveland became an incorporated city.  
October 29—The Bridge War. The float bridge over the Cuyahoga was partially destroyed.
- 1837 January 4—The first breakwater legislation was introduced in the City Council.
- 1839 November 17—Cleveland's manufacturing section suffered its first fire. Outhwaite's soap factory burned.
- 1845 June 16—The Weddell House was opened. This was Cleveland's leading hotel for many years.
- 1847 September 15—Cleveland's first telegraph office began business.



- 1848 July 7—The Board of Trade was founded.
- 1849 September 29—The barque "Eureka" sailed for California bearing a number of Clevelanders to the land of gold.  
December 16—Artificial gas was first used for lighting the city streets.
- 1850 March 16—First section of first railroad entering Cleveland was completed.
- 1852 September 1—First state fair held in Cleveland was opened.
- 1853 June 25—A party of southern and western business men visited the city—the first visitation of this kind.
- 1854 February 1—First through train arrived from Buffalo.  
October 27—Fire destroyed the New England Hotel and many other buildings.
- 1855 May 19—The Sault canal was completed.
- 1856 September 10—Cleveland's new water works system was completed.
- 1858 May 29—The Liverpool fleet started on its long voyage.
- 1859 October 25—The City Council authorized the Kinsman street railway company to lay tracks.
- 1860 October 25—Ground was broken for the East Cleveland street railway line.
- 1861 October 25—Telegraphic communication was established between Cleveland and San Francisco.
- 1862 March 28—The Board of Sinking Fund Commissioners was created by legislative act.  
November 11—First steam fire engine.
- 1863 February 3—The Council authorized construction of the West Side street railway.  
November 3—First through train arrived over A. & G. W. Railway line.
- 1864 February 22—Northern Ohio Sanitary Fair.  
October 22—First fire alarm telegraph system.
- 1866 November 10—Union depot opened. Pronounced largest and best appointed railway station in the United States.

- 1867 May 15—L. S. & M. S. Railway established.  
December 18—National Manufacturers' Convention.
- 1868 August 6—The iron steamer, the "J. K. White," was placed in commission.  
September 5—Bessemer steel was first produced in Cleveland.
- 1870 August 5—The first water works crib was launched.
- 1871 December 27—An Inventors' Exposition was held in the Central Rink. It lasted three weeks and was followed by a demand for a permanent exposition.
- 1877 January 26—First public exhibition of the Brush light.  
July 25—The first telephone was installed.
- 1878 December 27—The Superior viaduct was dedicated.
- 1879 April 29—The Public Square was lighted by electricity.
- 1881 April 27—First meeting of the Builders' Exchange.
- 1883 February 4—Disastrous flood.
- 1884 September 7—Great fire on the flats.
- 1886 February 11—First Manual Training School opened.  
August 4—First fire boat launched.
- 1887 October 16—The Lick telescope was completed—the work of a Cleveland factory.
- 1889 June 30—First electric motor was run over the East Cleveland street railway line.  
October 15—The Pan-American delegates visited the city.
- 1893 February 6—The Board of Trade was reorganized and became The Cleveland Chamber of Commerce.
- 1896 July 19—Cleveland's first Centennial Celebration began.
- 1898 March 24—The first American-made automobile was sold—the product of a Cleveland factory.
- 1899 May 3—The Chamber of Commerce building was dedicated.
- 1900 October 5—Clevelanders celebrated the city's first Old Home Week.
- 1909 June 7—The Cleveland Industrial Exposition opened.

## THE CLEVELAND CHAMBER OF COMMERCE

CLEVELAND is a city in which progress is the watchword, and The Cleveland Chamber of Commerce, in organization and work, typifies the onward spirit.

The first object of The Chamber of Commerce is, of course, commerce; and this is undoubtedly what its founders had in mind when they organized. It seeks to strengthen and develop the interests of Cleveland, and to bring more business to its commercial and industrial enterprises.

The English Boards of Trade and the German Chambers of Commerce devote by far the greater part of their attention to business questions. In Germany the Imperial Government compels the business men to maintain Chambers of Commerce. These are representative bodies, semi-official, and strictly regulated by law. Each business man is required to contribute his share to the organization.

In Great Britain the Boards of Trade exercise certain judicial functions. They adjudicate differences between their members and between business houses. They are largely influential in the settlement of labor questions.

In our own country, although commercial organizations are made up of voluntary members, their influence in the community sometimes exceeds the semi-official organizations of England and Germany.

The Cleveland Chamber of Commerce through its committees equally represents the manufacturer, the wholesaler, the retailer. Each branch of trade has certain problems of mutual interest, and the fact that the individual members of that branch may be competitors does not prevent co-operation along lines of mutual interest. It is the business of The Chamber of Commerce to develop this co-operation. For instance, the shippers of Cleveland may not be satisfied with the shipping facilities granted by the railroads. On the contrary the railroads may be dissatisfied with the methods of the shipper. The Chamber of Commerce, through its Transportation Committee, has been able to bring these two elements together and to secure changes which have been to the advantage of both parties.

The Wholesale Merchants Board has conducted twenty-three trade extension excursions into the towns of Ohio and neighboring states to carry the gospel of the Cleveland market. These excursions are conducted by means of a special train, and on each trip the business men of thirty or forty cities and towns are visited by members of the Board.

The Chamber of Commerce assists in securing new industries for Cleveland; not by offering capital, bonuses, or freedom from taxation, but by finding out the industries for which Cleveland is the best location economically, and then convincing the industries of that fact.

The organization has conducted an extensive campaign for the development of Cleveland's inner and outer harbor; upon the growth of which, more than any other one thing, depends Cleveland's supremacy as an iron and steel center.

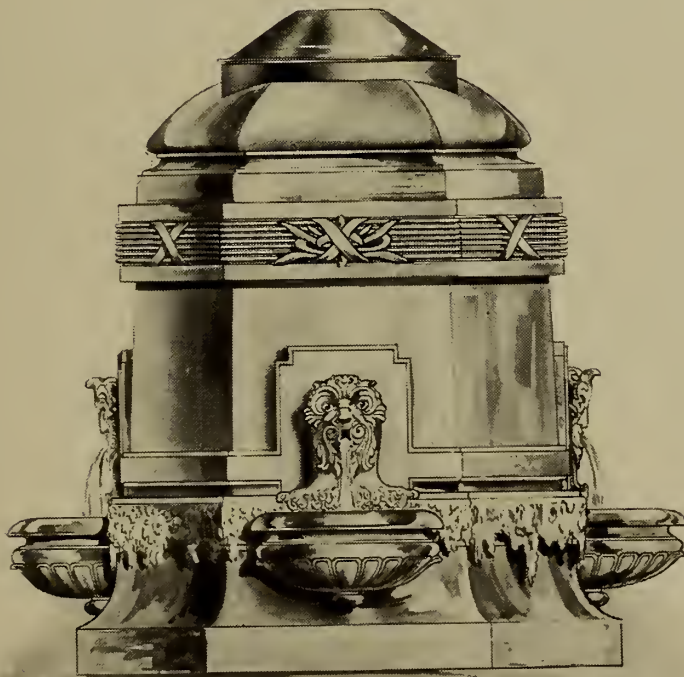
There is hardly a movement for the development of the manufacturing and commercial Cleveland in which this organization has not had a part. But the commercial organizations in this country which have devoted themselves exclusively to the promotion of business ends are not today the strongest organizations in the country. The organization which has the largest influence and which is most effective in the upbuilding of the community, is not simply a Chamber of Commerce, it is a Chamber of Citizenship. And so The Cleveland Chamber of Commerce has assumed the consideration of all questions which are a part of the responsibility of the citizens of a modern city.

The Chamber of Commerce studies all legislation affecting Cleveland which is introduced in the General Assembly, and it considers the ordinances before the City Council. It advises the community upon the passage of franchises and the issuing of bonds.

The Chamber of Commerce recognizes that the centralization of population in the city has created new problems, and its committees are endeavoring to solve these problems. It has assisted in securing adequate milk and meat inspection and an efficient system of street cleaning, proper building and tenement laws, medical inspection in the public schools, the development of the park system, and the inauguration of a city department of forestry. This organization has given consideration to the problems of capital and labor, and to the improvement of factory and labor conditions.

The Chamber has recognized the importance of public playgrounds, and has been influential in the development of the present effective system. The Chamber of Commerce has assumed the co-operative supervision of the charities of the city and has developed an efficiency in management of the various charitable organizations, and a co-operation among these organizations which is unequalled in any other city of the country.

The Chamber of Commerce believes that it is the duty of the influential men of this community to study the signs of the times—to assume the responsibility of the solution of the problems which are to be found in a great city—to devote their energies to the commercial, civic, social and esthetic development of the city—to have as their aim the Ideal Cleveland!



FOUNTAIN IN EXPOSITION BUILDING

OPENING CEREMONIES

CENTRAL ARMORY

MONDAY EVENING, JUNE SEVENTH,  
NINETEEN HUNDRED AND NINE

---

Music

Prayer

Rev. Francis T. Moran,  
Pastor of St. Patrick's Church

Address

Mr. Charles F. Brush,  
President of The Chamber of Commerce

Address

Mr. F. F. Prentiss,  
Chairman of the Exposition Committee

Music

Address

Hon. Tom L. Johnson,  
Mayor of Cleveland

Benediction

Rev. Frank DuMoulin,  
Dean of Trinity Cathedral

# SPECIAL DAYS AT THE EXPOSITION

MONDAY, JUNE 7th

Opening Day.

TUESDAY, JUNE 8th

Akron,  
Barberton,  
Bedford,  
Chardon,  
Cuyahoga Falls.

WEDNESDAY, JUNE 9th

Canton,  
Chagrin Falls,  
Erie,  
Garrettsville.

THURSDAY, JUNE 10th

Painesville,  
Toledo,  
Willoughby.

FRIDAY, JUNE 11th

Elyria,  
Lorain,  
Oberlin,  
Retail Merchants.

SATURDAY, JUNE 12th

Cleveland Day,  
American Hardware Manu-  
facturers Association,  
Southern Hardware Jobbers  
Association.

MONDAY, JUNE 14th

Buffalo,  
Detroit,  
Fraternal.

TUESDAY, JUNE 15th

Pittsburg,  
Youngstown.

WEDNESDAY, JUNE 16th

Columbus,  
Massillon,  
Ravenna,  
Wholesale Merchants.

THURSDAY, JUNE 17th

Ashtabula,  
Geneva,  
Sandusky.

FRIDAY, JUNE 18th

Alliance,  
Ashland,  
Galion,  
Mansfield,  
Shelby.

SATURDAY, JUNE 19th

Closing Day.

## PRIZE COMPETITIONS

WITH a view to promoting interest in the Exposition, the Executive Committee planned two competitions, a slogan competition and a poster competition. Prizes were offered and many competitors entered the contests—the results drawing wide-spread attention.

The names of the prize winners and of the competitors who received honorable mention, are given below.

### SLOGAN CONTEST

J. H. Considine, prize winner

Honorable mention:

A. G. Wallace

H. P. Cook

S. F. Fish

James H. Clark

J. V. McCauley

Arthur DePree

C. W. McCormick

Caroline L. MacCracken

Mrs. F. H. Browne

Miss Fanny Brown

### POSTER CONTEST

Clarence Hanson, first prize

H. P. Cook, second prize

Frank Ray Walker, third prize

Honorable mention:

Ray Parmelee

R. M. Allyn

Wm. A. Roberts

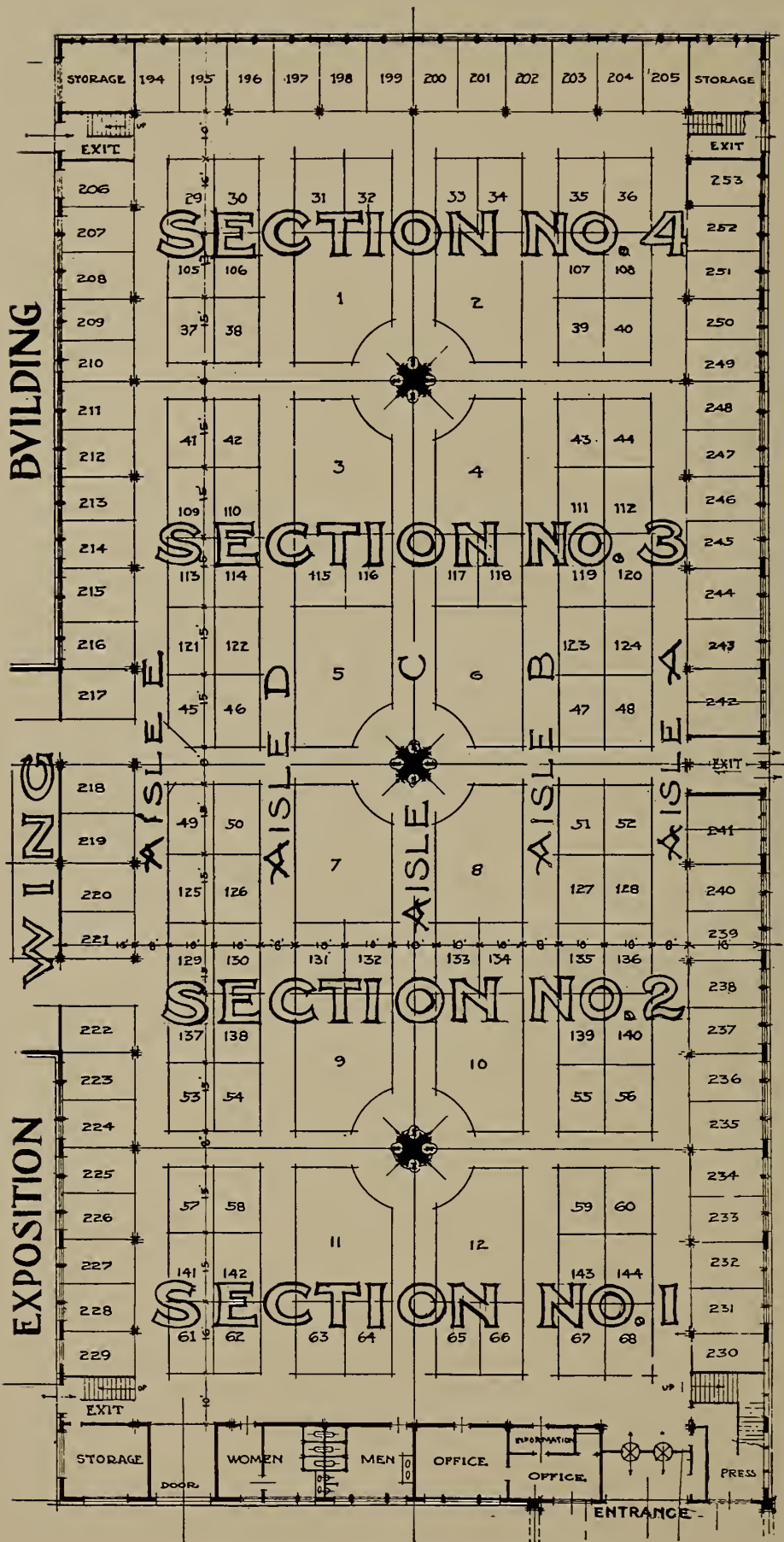
F. W. Striebinger

Frank N. Wilcox.

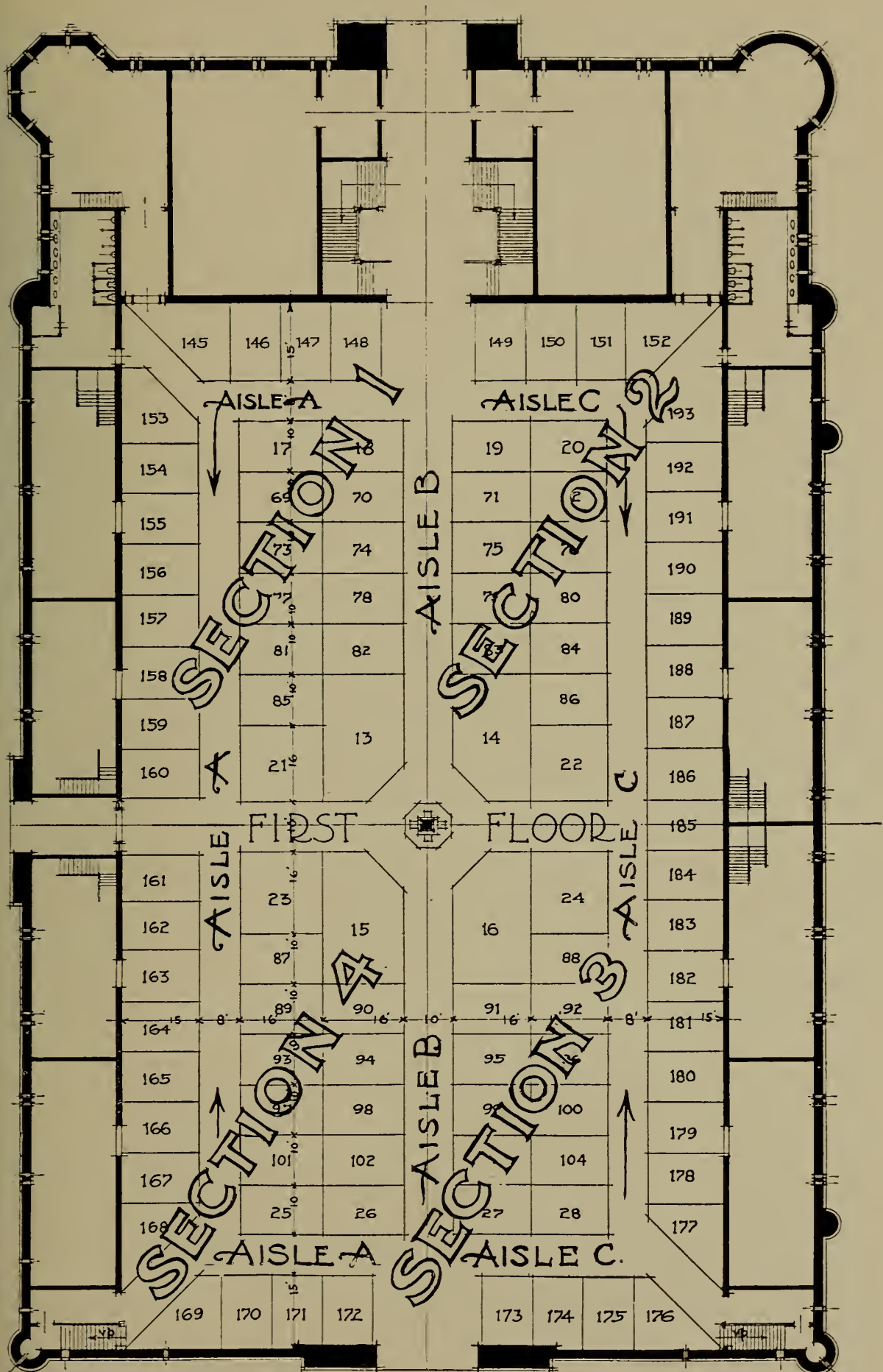


IN presenting the following Directory of Exhibitors the Executive Committee desires to express its appreciation of the enthusiastic approval and cheerful support given the Exposition by the manufacturers whose products are displayed.

These exhibitors have clearly shown throughout the time of preparation that in the present project they place civic pride high above commercial benefit.



EXPOSITION BUILDING—FLOOR PLAN



# CENTRAL ARMORY

CENTRAL ARMORY—FLOOR PLAN

# DIRECTORY OF EXHIBITORS

|  | Building. | Section. | Aisle. |
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| <b>A. &amp; W. ELECTRIC SIGN CO., THE</b> .....<br>Electric Signs.<br>Office and Plant, Prospect and West 3rd St.  | Armory    | 4        | A      |
| <b>ACME BRASS WORKS</b> .....<br>Plumbers' Supplies and Brass Fittings.<br>Office and Plant, 2662 East 76th St., corner Dell Ave.  | Expo.     | 3        | B      |
| <b>ADAMS-BAGNALL ELECTRIC CO., THE</b> .....<br>Arc Lamps.<br>Office and Plant, Stanton Ave. at C. & P. Ry. Crossing.  | Armory    | 3        | B      |
| <b>ALLYNE BRASS FOUNDRY CO., THE</b> .....<br>Brass, Bronze and Aluminum Castings.<br>Plants, Cleveland, Buffalo and Detroit.<br>Cleveland Office, 2043 East 61st Pl. near Carnegie.   | Expo.     | 1        | E      |
| <b>AMERICAN BALL BEARING CO., THE</b> .....<br>Anti-Friction Bearings for all Purposes.<br>Office and Plant, Edgewater Park and L. S. & M. S. Ry.  | Expo.     | 3        | E      |
| <b>AMERICAN MULTIGRAPH SALES CO., THE</b> .....<br>The Gammeter Multigraph.<br>Cleveland Sales Office, 314 and 315 Caxton Building.<br>General Offices, 40th St. and Kelley Ave.   | Armory    | 4        | A      |
| <b>AMERICAN STEEL &amp; WIRE CO.</b> .....<br>Wire, round, flat, square, triangular and odd-shaped, for manufacturing purposes, Piano Wire, Mattress, Broom and Weaving Wire, Wire Hoops, Electrical Wires and Cables, Telegraph and Telephone Wire, Rail Bonds, Wire Rope and Strand, Bale Ties, Nails, Staples, Spikes, Tacks, Barbed Wire, Farm and Field Fences, Concrete Reinforcement, Springs, Sulphate of Iron, Poultry Netting, Horse Shoes, Shafting.<br>Plants, Central Blast Furnaces, Newburgh Steel Works, Newburgh Wire Works, Cuyahoga Works, Consolidated Works, American Works, H. P. Works, Cleveland.<br>District Offices, Western Reserve Building. | Expo.     | 1        | C      |
| <b>AMERICAN WATCHMAN'S TIME DETECTOR CO., THE</b> .<br>Manufacturers of the Cleveland Magneto Clock.<br>General Offices, 2069 East 4th St.   | Armory    | Gallery  | W      |
| <b>ANDERSON CO., THE V. D.</b> .....<br>Steam Traps, Dryers, Expellers, etc.<br>Office and Plant, West 96th at Nickel Plate R. R.  | Expo.     | 2        | A      |
| <b>ANISFIELD CO., THE JOHN</b> .....<br>Cloaks.<br>Office and Factory, 1338 West 9th St.   | Armory    | 2        | B      |
| <b>ARISTO ARCH CO.</b> .....<br>Aristo Arch.<br>Office, 203 Prospect Ave.  | Armory    | 1        | A      |

|   | Building. | Section. | Aisle. |
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| <b>ART CHINA &amp; GLASS CO.</b> .....<br>China and Glass Novelties.<br>Office and Plant, 7915 East Decker Ave.   | Armory    | Gallery  | W      |
| <b>ATLAS BOLT &amp; SCREW CO., THE</b> .....<br>Bolts, Screws, etc.<br>Office and Plant, 1289 Marquette Rd.   | Expo.     | 2        | E      |
| <b>ATLAS CAR &amp; MANUFACTURING CO., THE</b> .....<br>Dryer Cars of all Descriptions, Transfer Cars, Turntables,<br>Steel Trucks, Steel Wheelbarrows, Complete Equip-<br>ment for Industrial Railroads.<br>Plants, Marquette opposite Hamilton, Lakeside near<br>Marquette Rd.<br>Office, 1289 Marquette Rd. | Expo.     | 2        | E      |
| <b>AUER REGISTER CO., THE</b> .....<br>Hot Air Registers.<br>Office and Works, 409 Long St. N. W.   | Armory    | Gallery  | W      |
| <b>AUTO PLATING &amp; MFG. CO., THE</b> .....<br>Plating Auto Parts.<br>Office and Works, 1938 Euclid Ave.  | Expo.     | 3        | C      |
| <b>EVERETT STAMPING CO., THE</b> .....<br>Stamping, Pressing and Forming Sheet Steel and other<br>Metals to order; "Never-Break" Steel Cooking Uten-<br>sils; Shovels, Spades and Scoops.<br>Office and Plant, 5207 Lakeside Ave. N. E.   | Expo.     | 2        | E      |
| <b>BAILEY WALL PAPER CO., THE</b> .....<br>Wall Paper.<br>Office and Factory, 1915 West 96th St.  | Armory    | Gallery  | W      |
| <b>BAKER MOTOR-VEHICLE CO., THE</b> .....<br>Electric Vehicles.<br>Office and Factory, Edgewater Park and L. S. & M. S. Ry.   | Expo.     | 3        | C      |
| <b>BALL WATCH CO., THE WEBB C.</b> .....<br>Watches and Jewelry.<br>Office and Factory, Superior Ave. corner West 3rd St.   | Armory    | Gallery  | W      |
| <b>BARDONS &amp; OLIVER</b> .....<br>Turret Machines.<br>Office and Factory, 1133 West 9th St.  | Expo.     | 4        | C      |
| <b>BARTLETT &amp; SNOW CO., THE C. O.</b> .....<br>Elevating and Conveying Machinery; Direct and Steam<br>Heat Dryers; Engineers.<br>Office and Factory, French between Columbus Rd. and<br>Merwin Ave.   | Expo.     | 2        | B      |
| <b>BEEAMAN LOCK CO., THE</b> .....<br>The Beeman Automatic Window Lock.<br>Office, 607 American Trust Building.   | Armory    | Gallery  | W      |
| <b>BILLINGS-CHAPIN COMPANY, THE</b> .....<br>Color Makers; Varnish Makers; Paint Manufacturers.<br>Eastern Departments, New York and Boston.<br>Cleveland Office and Factory, 1163 East 40th St. at<br>L. S. & M. S. Ry.  | Expo.     | 3        | C      |

|  | Building. | Section. | Aisle. |
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| <b>BISHOP &amp; BABCOCK CO., THE</b> .....<br>Soda Fountains, Carbonators (Automatic and Continuous),<br>Eureka Water Lifts, Apparatus for drawing and pre-<br>serving Beer, Machinery for Bottling Beer, Soda and<br>Mineral Waters.<br>Branch Offices and Factories, New York, Chicago, Cincin-<br>nati, St. Paul, Milwaukee, London, Eng.; Basel, Switz.<br>Cleveland Office and Factory, Hamilton Ave. corner East<br>48th St. | Armory    | 3        | C      |
| <b>BLACK CO., THE H.</b> .....<br>Coats, Suits, Skirts and Dresses.<br>Office and Factory, Superior Ave. from 19th to 21st St.   | Armory    | 1        | B      |
| <b>BONHARD ART FURNITURE CO., THE</b> .....<br>Designers and Makers of Hand-Made Furniture.<br>Show Room and Work Shop, 2056-2066 Euclid Ave.  | Armory    | 3        | C      |
| <b>BORN STEEL RANGE CO., THE</b> .....<br>Stoves.<br>Factory, 3945 West 25th St.<br>Office and Sales Room, 2163 East 9th St.   | Armory    | 4        | B      |
| <b>BOWLER FOUNDRY CO., THE</b> .....<br>Foundry Supplies.<br>Office and Factory, 1688 Columbus Rd.   | Expo.     | 1        | A      |
| <b>BROC CARRIAGE &amp; WAGON CO., THE</b> .....<br>Fine Vehicles and Automobile Bodies.<br>Office and Works, 1665 East 40th St.  | Expo.     | 4        | C      |
| <b>BROOKS HOUSEHOLD ART CO., THE</b> .....<br>Furniture and Interior Decorators.<br>Office and Factory, 2520 Prospect Ave.   | Armory    | 3        | C      |
| <b>BROWN HOISTING MACHINERY CO., THE</b> .....<br>Automatic Hoisting and Conveying Appliances, Friction<br>Clutches, Builders of every type of Hand and High<br>Speed Power Cranes.<br>Eastern Offices, Fulton Terminal, New York; Frick<br>Building, Pittsburg.<br>Cleveland Works, Hamilton Ave. and East 45th St.<br>Office, 4403 St. Clair Ave.  | Expo.     | 2        | A      |
| <b>BRUCE-MACBETH ENGINE CO., THE</b> .....<br>Gas Engines, Steam Blowing Engines.<br>Office and Factory, 2111 Center Ave. N. W.  | Expo.     | 1        | A      |
| <b>BYERLEY &amp; SONS</b> .....<br>Manufacturers of Asphalt.<br>Office and Factory, 2484 West 4th St.  | Expo.     | 3        | B      |
| <b>CALCULUS CO., THE</b> .....<br>Calculating Machines.<br>Office, 4th floor Ellastone Building, 414 Prospect Ave.   | Armory    | 4        | A      |
| <b>CENTURY AWNING CO.</b> .....<br>Tents, Awnings, Flags, Etc.<br>Office and Factory, 10309 Euclid Ave.  | Armory    | 4        | B      |

|  | Building. | Section. | Aisle. |
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| <b>CHAMPION STEEL RANGE CO., THE</b> .....<br>Gas and Coal Ranges, Champion Patented Double Flue<br>Hot Blast Steel Ranges, Hot Blast Coal Heating Stoves,<br>Gas Heaters and Hot Plates.<br>Office and Factory, 4050 West 25th St. below Brooklyn<br>Bridge.  | Armory    | 1        | A      |
| <b>CHANDLER &amp; PRICE CO., THE</b> .....<br>Printing Presses and Printing Machinery.<br>Office and Works, 6000 Carnegie Ave.   | Armory    | 4        | A      |
| <b>CHANDLER &amp; RUDD CO., THE</b> .....<br>Groceries, Confectionery, Fruits, etc.<br>Main Office, 234-236 Euclid Ave.<br>Branches, Euclid corner East 55th St., 10609-10611<br>Euclid Ave.   | Expo.     | Wing     |        |
| <b>CHASE MACHINE CO., THE</b> .....<br>Engineers, Machinists, Blacksmiths, Builders of Hoisting<br>Engines.<br>Office and Works, 2313 Elm St. N. W.  | Expo.     | 1        | E      |
| <b>CHEMICAL SUPPLY CO.</b> .....<br>Disinfectants, Soaps and Metal Polish.<br>Office and Works, 1565 Merwin St.  | Armory    | Gallery  | E      |
| <b>CHISHOLM &amp; MOORE MFG. CO., THE</b> .....<br>Malleable Iron Castings, Chain Hoists, I Beam Trolleys,<br>Railway Track Appliances, etc., etc.<br>Office and Works, Lakeside Ave. and East 49th St.  | Expo.     | 2        | C      |
| <b>CITY ICE DELIVERY CO., THE</b> .....<br>Manufactured Ice.<br>Office, 908 New England Building.<br>Stations, 3, Merwin Rd.; 4, W. 65th and Madison Ave.;<br>5, E. 27th and Orange; 6, E. 63rd and Scovill Ave.;<br>7, E. 43rd and Hough Ave.; 8, Lockwood Ave.; 10,<br>Addison Rd.; 11, E. 76th and Dell Ave.; 12, Distillata,<br>1542 E. 24th St.; 14, Farm, Stop 36, N. O. T. & L.<br>Co.; 15, Rocky River; 16, W. 15th and Abbey;<br>18, 464 E. 105th St.   | Expo.     | Wing     |        |
| <b>CLEVELAND ADDRESSING MACHINE CO.</b> .....<br>Addressing Machines.<br>Office and Factory, 1232 East 3rd St.   | Armory    | 4        | A      |
| <b>CLEVELAND-AKRON BAG CO., THE</b> .....<br>Burlap Importers, Paper Makers, Manufacturers of Bur-<br>lap, Cotton and Paper Bags of all kinds.<br>Bag Factory and General Office, Scranton Rd. corner<br>Auburn Ave.<br>Grocery Bag Plant, 2570 Broadway, Cleveland; Standard<br>Paper Mill, 540 E. 37th St., Cleveland; Boston Paper<br>Mill, Boston, O.; Detroit Bag Factory, Fourth Ave.<br>and Abbott, Detroit, Mich.; Buffalo Bag Factory, Rano<br>St. and D. L. & W. R. R., Buffalo, N. Y.; Manila<br>Bag Factory, 61 Soledad, Manila, P. I. | Armory    | 4        | A      |
| <b>CLEVELAND ARTIFICIAL LIMB CO., THE</b> .....<br>Artificial Limbs.<br>Office and Works, 4th floor, 717 Superior Ave.   | Armory    | 1        | A      |

|   | Building. | Section. | Aisle. |
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| <b>CLEVELAND CITY FORGE &amp; IRON CO. ....</b><br>Forgings.<br>Office and Works, Lakeside Ave., opposite East 45th St.   | Expo.     | 1        | B      |
| <b>CLEVELAND CLOAK INDUSTRY ASSOCIATED<br/>EXHIBIT, THE .....</b>   | Armory    | 2        | B      |
| <b>CLEVELAND CO-OPERATIVE STOVE CO., THE.....</b><br>Stoves and Ranges.<br>Salesroom and Foundry, 2323 East 67th St., corner<br>Central Ave. at C. & P. Ry.   | Armory    | 1        | A      |
| <b>CLEVELAND DESK CO. ....</b><br>Dealers and Manufacturers of Fine Office Furniture.<br>Office, 1360 Ontario St.   | Armory    | 3        | C      |
| <b>CLEVELAND ELECTRIC ILLUMINATING CO., THE....</b><br>Electric Power.<br>General Offices, The Cuyahoga Building.<br>Sales Department, 232 Superior Ave. N. E.<br>Canal St. Station, Canal St.; Sub Stations, A, 1753 E.<br>17th St.; B, 1953 E. 105th St.; C, 2497 E. 55th St.;<br>D, 1945 W. 28th St.; E, 14291 Euclid Ave., East<br>Cleveland; F, 12507 Plover St., Lakewood; Barn,<br>2280 Clarkwood Rd.; Stock Room, 2298 Clarkwood<br>Rd.; Garage, 1027 Erie Court. | Armory    | 3        | B      |
| <b>CLEVELAND FAUCET CO., THE .....</b><br>Soda Fountains, Carbonators, Beer Pumps, Faucets, Car-<br>bonic Gas Regulators, Champion Water Lifts, Champion<br>Air Compressors.<br>Branch Offices, Chicago, New York, St. Louis, San Fran-<br>cisco, Pittsburg, Manheim.<br>Main Office and Factory, 706-708 Frankfort Ave. N. W.,<br>Cleveland.   | Expo.     | 1        | C      |
| <b>CLEVELAND FILLET CO., THE.....</b><br>Patternmakers' Supplies, Crescent Leather Fillet and<br>Improved White Metal Pattern Letters.<br>Office and Works, 1444 East 49th St.  | Expo.     | 4        | E      |
| <b>CLEVELAND FLUSHOMETER CO., THE.....</b><br>Flushometers.<br>Office and Factory, Noble Ct.  | Expo.     | 1        | A      |
| <b>CLEVELAND FOLDING MACHINE CO., THE.....</b><br>Folding Machines.<br>Office, Wade Building.   | Armory    | 4        | A      |
| <b>CLEVELAND FOUNDRY CO., THE.....</b><br>Blue Flame Oil Cooking Stoves and Oil Heating Stoves.<br>Office and Factory, 7503 Platt Ave. at C. & P. Ry.   | Expo.     | 3        | B      |
| <b>CLEVELAND FROG &amp; CROSSING CO., THE .....</b><br>Railroad Frogs, Crossings, Switches and Special Track<br>Work.<br>Office and Works, 6917 Bessemer Ave. at C. & P. and<br>Erie Ry.  | Expo.     | 2        | E      |



|  | Building. | Section. | Aisle. |
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| <b>CLEVELAND FRUIT JUICE CO.</b> .....<br>Benton, Hall & Company, Proprietors.<br>Office, 1382 West 9th St.  | Armory    | 3        | B      |
| <b>CLEVELAND FURNACE CO., THE</b> .....<br>Iron and Steel.<br>Works, Clark Ave. and Cuyahoga River.<br>Office, Rockefeller Building.   | Expo.     | 1        | E      |
| <b>CLEVELAND GALVANIZING WORKS CO., THE</b> .....<br>Die-Cast White Metal Pattern Letters and Figures, Brass<br>Pattern Letters and Figures, "Fit-Well" Brass Dowels,<br>"Fit-Well" Rapping Plates, "Hold-Fast" Pinch Dogs,<br>"Precision" Leather Fillet, "Precision" Wood Fillet,<br>"Precision" Shrinkage Rules, Steel Letters and Fig-<br>ures, Polished Brass Letters, Machinery Name Plates,<br>Stamping Letters for Concrete, etc., Cleveland Galvan-<br>ized Pump Chain, Rubber Pump Buckets, Lightning<br>Rods, Braces, Fixtures and Supplies, Custom Galvan-<br>izing and Tinning.<br>Main Office and Factory, E. Cooper Ave. and Penna. R. R. | Expo.     | 3        | A      |
| <b>CLEVELAND HARDWARE CO., THE</b> .....<br>Wagon Hardware, Carriage Hardware, Automobile Forg-<br>ings.<br>Office and Works, 1241 East 45th corner Lakeside Ave.  | Expo.     | 1        | A      |
| <b>CLEVELAND ICE MACHINE CO., THE</b> .....<br>Ice-making and Refrigerating Machinery and Fittings.<br>Office and Works, 1615-1619 Merwin St.  | Expo.     | 2        | A      |
| <b>CLEVELAND NECKWEAR CO., THE</b> .....<br>Neckwear.<br>Office and Factory, 1371 West 6th St.   | Armory    | Gallery  | W      |
| <b>CLEVELAND PAPER MFG. CO., THE</b> .....<br>Printing Paper.<br>Office, 211 St. Clair Ave. N. E.  | Armory    | 4        | A      |
| <b>CLEVELAND PEARL WORKS CO., THE</b> .....<br>Manufacturers of High Grade Ocean Pearl Buttons.<br>Office and Factory, 405 Lakeside Ave.   | Armory    | 1        | A      |
| <b>CLEVELAND PHONOGRAPH RECORD CO., THE</b> .....<br>Phonograph Records.<br>Office, The Arcade.<br>Factory, 1390 East 30th St.   | Armory    | 3        | C      |
| <b>CLEVELAND PLANER WORKS CO., THE</b> .....<br>Open Side Planers and Special Machinery.<br>Office and Works, 3148 Superior Ave.   | Expo.     | 4        | B      |
| <b>CLEVELAND PROVISION CO., THE</b> .....<br>Pork Packers, Slaughterers and Wholesale Dealers in<br>Dressed Beef, Mutton and Veal.<br>Packing House, Commercial Rd. corner West 3rd St.<br>Branch Office and Sales Room, 2291-2295 East 4th St.<br>Main Office, 420 Bolivar Rd.  | Expo.     | Wing     |        |

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| <b>CLEVELAND PUNCH &amp; SHEAR WORKS CO., THE</b> . . . . .<br>Power Punches, Shears, Rotary Planers, Plate Planers,<br>Bending Rolls, Straightening Rolls, Radial Drills,<br>Punches, Dies, etc.<br>Office and Factory, 3929 St. Clair Ave.   | Expo.     | 4        | A      |
| <b>CLEVELAND ROUND STOVE MANUFACTURING CO.,<br/>THE</b> . . . . .<br>Stoves.<br>Office and Factory, 2262-2264 East 69th St.  | Armory    | 2        | C      |
| <b>CLEVELAND SHAFT SPRING CO.</b> . . . . .<br>Office, 810 Champlain Ave.  | Expo.     | 4        | A      |
| <b>CLEVELAND STAMPING &amp; TOOL CO., THE</b> . . . . .<br>Enameled Steel Hollow Ware.<br>Office and Plant, Hamilton Ave. corner East 53rd St.   | Expo.     | 2        | B      |
| <b>CLEVELAND STONE CO., THE</b> . . . . .<br>Miners and Manufacturers of Sandstone.<br>Quarries, Berea, Olmsted Falls, Columbia, West View<br>and Amherst, O.; Grindstone City, Mich.; Edgemont,<br>S. D.<br>General Offices, Hickox Building, Cleveland.  | Expo.     | 4        | D      |
| <b>CLEVELAND STORE FIXTURE CO., THE</b> . . . . .<br>Store Fixtures.<br>Office and Factory, 4059 St. Clair Ave.  | Armory    | 2        | C      |
| <b>CLEVELAND TANNING CO., THE</b> . . . . .<br>Tanners.<br>Office and Plant, Jennings Rd. near Denison Ave.  | Expo.     | 4        | C      |
| <b>CLEVELAND TELEPHONE CO., THE</b> . . . . .<br>General Offices, Champlain Ave. corner West 3rd St.   | Expo.     | 1        | A      |
| <b>CLEVELAND TWIST DRILL CO., THE</b> . . . . .<br>Twist Drills, Reamers, Taps and Cutters.<br>Salesrooms, New York, Cleveland, Chicago.<br>Factory and Main Office, Lakeside Ave. corner East 49th<br>St., Cleveland.   | Expo.     | 2        | B      |
| <b>CLEVELAND VACUUM MACHINERY CO.</b> . . . . .<br>Vacuum Machinery.<br>Office and Works, 1107 Prospect Ave.   | Armory    | 1        | A      |
| <b>CLEVELAND WASHBOARD CO., THE</b> . . . . .<br>Washboards.<br>Office and Factory, 8617 Buckeye Rd.   | Expo.     | 3        | D      |
| <b>CLEVELAND WINDOW GLASS &amp; DOOR CO., THE</b> . . . . .<br>Plate Glass, Window Glass, Art Glass, Art Glass Domes,<br>Mirrors, Paints, Door, Sash, Millwork.<br>Office and Factory, 209-211 Champlain Ave. and 200-204<br>Prospect Ave.   | Expo.     | 3        | E      |
| <b>CLEVELAND WIRE SPRING CO., THE</b> . . . . .<br>Coiled Wire Springs, Steel Spring Wire, Wire Formed<br>to Special Shapes, Steel Boxes, Steel Barrels, Barrel<br>Trucks, Steel Shop Shelving and Racks, Steel Waste<br>Cans, Steel Ash Barrels, Lathe Pans, Brick and Mortar<br>Hods, Tote Boxes, etc.<br>Office and Factory, 1281 East 38th St. corner Hamilton<br>Ave. | Expo.     | 2        | A      |

|   | Building. | Section. | Aisle. |
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| <b>CLEVELAND WORSTED MILLS CO., THE</b> .....<br>Spinners, Weavers, Dyers of Textile Fabrics.<br>Operating Mills, Cleveland; Ravenna, O.; Jamestown,<br>N. Y., and Philadelphia, Pa.<br>General Offices, 5900-6120 Broadway.  | Armory    | 2        | B      |
| <b>CLIMAX REFINING CO., THE</b> .....<br>High Grade Lubricating Oils and Greases, Paints, Oils<br>and Reducing Spirits, Black Elastic Rubber Paint,<br>Non-Carbon Gas Engine Oils, Automobile Lubricants,<br>Climax Linseed Oil, Soap and Petroleum Specialties.<br>General Offices, Williamson Bldg. | Expo.     | 3        | B      |
| <b>COHN-GOODMAN CO., THE</b> .....<br>Cloaks and Suits.<br>Office and Factory, 1140 West 6th St.  | Armory    | 2        | B      |
| <b>COMEY &amp; JOHNSON CO., THE</b> .....<br>Manufacturers of Ladies' Straw and Felt Hats.<br>Office and Factory, 1426 Superior Ave. N. E.  | Armory    | 1        | A      |
| <b>CUYAHOGA RENDERING &amp; SOAP WORKS, THE</b> .....<br>Laundry and Toilet Soaps.<br>Office and Plant, Denison Ave. near Cuyahoga River.   | Expo.     | Wing     |        |
| <b>CYCLONE WOVEN WIRE FENCE CO., THE</b> .....<br>Fences for any purpose, Gates, Flower Bed Guards, Tree<br>Guards, Arches, Trellis, Window Guards, Posts, Rail-<br>ing, etc.<br>Office and Factory, 1230-1236 East 55th St.  | Expo.     | 3        | E      |
| <b>DANGLER STOVE CO. DIV., AMERICAN STOVE CO.</b> ...<br>Gas, Gasoline and Oil Stoves, Coal and Wood Steel<br>Heaters.<br>Cleveland Office and Factory, 5017 Perkins Ave. at<br>C. & P. Ry.   | Armory    | 2        | C      |
| <b>DAVIS CO., THE W. B.</b> .....<br>Furnishers, Shirtmakers, Hatters and "Good Clothes."<br>307-311 Euclid Ave.  | Armory    | 1        | B      |
| <b>DIAMOND SHOW CASE CO., THE</b> .....<br>Manufacturers of all glass Show Cases.<br>Office and Factory, 2210 Superior Ave., Viaduct.   | Armory    | 3        | C      |
| <b>DIEBOLD-PETERS CO., THE</b> .....<br>Designers and Manufacturers of High Grade Machinery<br>and Interchangeable Parts.<br>Office and Works, Whitney Power Bldg., Section "C."  | Expo.     | 4        | A      |
| <b>DOMESTIC VACUUM CLEANER CO.</b> .....<br>Portable Vacuum Cleaners and Appliances.<br>Office, Rooms 19 and 20, Brooklyn Bank Bldg., corner<br>Archwood and West 25th St.  | Armory    | 1        | A      |
| <b>DOMINION HAIR TONIC CO.</b> .....<br>Hair Tonic.<br>Office, 746 Euclid Ave.  | Armory    | Gallery  | E      |

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| <b>EBERHARD MANUFACTURING CO., THE</b> .....<br>Malleable Iron, Carriage, Wagon and Saddlery Hardware.<br>Office and Plant, Tennyson Road at C. & P. Ry.   | Expo.     | 4        | C      |
| <b>ECLIPSE ELECTROTYPE &amp; ENGRAVING CO., THE</b> ....<br>Makers of Printing Plates for Commercial Advertising<br>and Illustrative Purposes.<br>Factory, 409-419 Frankfort Ave. N. W.<br>Offices, 308-315 Century Bldg., 414 Superior Ave. N. W. | Armory    | 4        | A      |
| <b>EDMONDSON CO., THE</b> .....<br>Lantern Slides, Transparencies and Bromoils.<br>Office and Works, 421-423 Caxton Bldg.  | Armory    | Gallery  | W      |
| <b>EDMONDSON CO., GEORGE M.</b> .....<br>Photographers in Portraiture.<br>Studio, 1822 Euclid Ave.   | Armory    | 3        | C      |
| <b>EDWARDS CO., THE WM.</b> .....<br>Wholesale Groceries and Liquors.<br>Office, Salesroom and Factory, 1430-1452 West 9th St.   | Expo.     | Wing     |        |
| <b>EMPIRE PLOW CO., THE</b> .....<br>Plows, Cultivators, Harrows and other Agricultural<br>Implements.<br>Factories, Cleveland and Ensley, Ala.<br>Cleveland Office and Factory, 3164 East 65th St.  | Expo.     | 2        | E      |
| <b>FEIGENBAUM TRUNK CO., THE</b> .....<br>Trunks, Sample Cases and Leather Goods.<br>Office and Factory, 1266-1276 West 6th St.  | Armory    | 1        | A      |
| <b>FERRY CAP &amp; SET SCREW CO., THE</b> .....<br>Steel and Brass Cap Screws, Set Screws, Machine Screws<br>and Special Screws.<br>Office and Factory, 2151 Scranton Road.  | Expo.     | 1        | D      |
| <b>FISCHER &amp; JIROUCH</b> .....<br>Decorative Sculptors.<br>Office and Factory, 1008 Scovill Ave.   | Expo.     | 3        | D      |
| <b>FISH BRUSH FACTORY</b> .....<br>Fish's 20th Century Patent Brushes.<br>Office and Factory, 4700-2-4 Lorain Ave.   | Expo.     | 3        | E      |
| <b>FOOTE-BURT CO., THE</b> .....<br>Single and Multiple Spindle Drilling Machines, and<br>Reliance Bolt Cutters.<br>Office and Factory, St. Clair Ave. and 41st St.  | Expo.     | 4        | C      |
| <b>FOREST CITY PAINT &amp; VARNISH CO., THE</b> .....<br>Paints and Varnishes.<br>Office and Works, 3334 Lakeside Ave.<br>Display Room, 505 Schofield Bldg.  | Expo.     | 3        | B      |
| <b>FOREST CITY STEEL &amp; IRON CO., THE</b> .....<br>Structural Steel and Iron; Heavy Wire Work.<br>Office and Works, West 110th, near Detroit Ave.   | Expo.     | 4        | D      |

|  | Building. | Section. | Aisle. |
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| <b>FRIED CLOAK CO.</b> .....<br>Cloaks.<br>Office and Factory, 1233 West 9th St.   | Armory    | 2        | B      |
| <b>FULLER CARPET CLEANING &amp; RUG MFG. CO., THE.</b> ..<br>Carpet Cleaning and Rug Manufacturing.<br>Office and Works, 7606 Carnegie Ave.  | Armory    | Gallery  | W      |
| <b>GABRIEL HORN MFG. CO.</b> .....<br>Automobile Horns and Shock Absorbers.<br>Office and Factory, 1407 East 40th St.  | Expo.     | 2        | D      |
| <b>GAS FIXTURE &amp; BRASS CO.</b> .....<br>Gas, Electric and Combination Fixtures.<br>Office and Factory, 318 High Ave., corner East 4th St.  | Armory    | 3        | C      |
| <b>GENERAL INCANDESCENT LAMP CO., THE.</b> .....<br>Incandescent Lamps.<br>Branch Offices, San Francisco, Seattle, St. Louis, Cincinnati, New York City, Kansas City.<br>Cleveland Office, 204-208 Electric Building.<br>Factory, East 45th St. and Hough.   | Armory    | 4        | B      |
| <b>GLAUBER BRASS MANUFACTURING CO.</b> .....<br>Finest Brass Goods made for Plumbing and Water Works.<br>Offices and Works, Superior Ave.—from 49th to 51st Streets N. E.  | Expo.     | 3        | E      |
| <b>GLIDDEN VARNISH CO., THE.</b> .....<br>Manufacturers of Varnishes, Enamels, Stains, Japans, Wood Fillers, Iron Fillers, Marine Paints, Jap-A-Lac, Insulating Varnishes, Machinery Enamels, Concrete Floor Dressing.<br>Works, Berea Road, corner West Madison Ave.<br>Offices (Administration Building), at Works, Berea Road, corner West Madison Ave. | Expo.     | 3        | C      |
| <b>GLOBE MACHINE &amp; STAMPING CO., THE.</b> .....<br>Tumbling Barrels, Tool and Battery Boxes for Automobiles, Robe Rails, Coat Rails, Foot Rests for Automobiles; Sherardizing; Special Manufacturing to Order; Plating.<br>Office and Works, 3900 Hamilton Ave.  | Expo.     | 2        | A      |
| <b>GRASSELLI CHEMICAL CO., THE.</b> .....<br>Chemicals.<br>Works, 3091 Independence Road, near Broadway.<br>Main Offices, 784 The Arcade.  | Expo.     | 3        | B      |
| <b>GREENHUT CLOAK CO., THE</b> .....<br>Cloaks.<br>Office and Factory, 705 St. Clair Ave.  | Armory    | 2        | B      |
| <b>GROSS CO., THE L. N.</b> .....<br>Makers of Ladies' Waists and Dresses.<br>Office and Factory, 1250 Ontario St.   | Armory    | 2        | B      |

|  | Building. | Section. | Aisle. |
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| <b>GROSSMAN PAPER BOX CO., THE</b> .....<br>Fancy Paper Boxes, Commercial and Folding Boxes,<br>Novelties, Patented Boxes.<br>Office and Factory, 1729 to 1745 Superior Ave.   | Armory    | 4        | A      |
| <b>GUND BREWING CO., THE</b> .....<br>Brewers and Bottlers.<br>Office and Brewery, 1447 Davenport Ave. N. E.   | Expo.     | Wing     |        |
| <b>H. &amp; H. ART METAL &amp; MFG. CO.</b> .....<br>Art Fixtures, Antique, Bronze and Copper Novelties.<br>Salesroom, 212 Prospect Ave.   | Armory    | Gallery  | E      |
| <b>HAHN CO., THE J. N.</b> .....<br>Corrugated Paper Shipping Cases and Corrugated Paper<br>Specialties; Wooden Boxes and Reshipping Cases of<br>all kinds.<br>Office and Factory, Cuyahoga Ave. and West 3rd St.  | Armory    | 4        | A      |
| <b>HALL SIGN CO.</b> .....<br>Signs.<br>Office and Factory, 1839 West 25th St.   | Armory    | Gallery  | W      |
| <b>HALLE BROS. CO., THE</b> .....<br>Manufacturing Furriers, Ready-to-wear Apparel for<br>Women and Children.<br>Office and Salesroom, 429 to 439 Euclid Ave.  | Armory    | 1        | A      |
| <b>HASEROT CO., THE</b> .....<br>Coffee Importers and Roasters.<br>Canned Goods Factors.<br>Factory, 520 Wigman Court.<br>Sales Office, 521-527 Woodland Ave. S. E.  | Armory    | Gallery  | E      |
| <b>HILL CLUTCH CO., THE</b> .....<br>Engineers, Founders and Machinists; Manufacturers of<br>Power Transmitting Equipment; Elevating, Convey-<br>ing and Cement Machinery.<br>Branches, 36 Vesey St., New York; 610 Marquette<br>Bldg., Chicago.<br>Factory and Main Offices, Foot of West 58th St.,<br>Cleveland. | Expo.     | 2        | A      |
| <b>HOMER COMMUTATOR CO., THE</b> .....<br>Electrical Commutators.<br>Office and Factory, 4748 Hough Ave.   | Expo.     | 2        | D      |
| <b>HUMPHREY CO., THE</b> .....<br>Originators of the famous Humphrey Popcorn and Pure<br>Cream Candy.<br>Owners and Operators of Euclid Beach Park.  | Expo.     | Wing     |        |
| <b>HUTCROFT &amp; SONS, D. G.</b> .....<br>Auto Body Manufacturers.<br>Office and Factory, 1318 West 78th St.  | Expo.     | 3        | D      |
| <b>IDEAL SAD IRON MFG. CO., THE</b> .....<br>Self-Heating Sad Irons.<br>Factory, 211 High St.<br>Offices, 10th Floor Guardian Bldg.  | Armory    | 1        | A      |

|   | Building. | Section. | Aisle. |
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| <b>JACKMAN'S SONS, WM.</b> .....<br>Fur Garments.<br>Office and Shop, 1229 West 6th St.   | Armory    | 2        | C      |
| <b>JOHNSTON &amp; JENNINGS CO., THE</b> .....<br>Founders, Engineers and Machinists.<br>Office and Works, Addison Road at L. S. & M. S. Ry.   | Expo.     | 2        | E      |
| <b>KABER, M. &amp; SON</b> .....<br>Color Printers.<br>Office and Plant, 203-205 St. Clair Ave.   | Armory    | 4        | A      |
| <b>KEETCH KNITTING CO., THE WM. I.</b> .....<br>Knitted Coats and Fancy Knit Goods.<br>Factory, 8410-8412 Lake Ave.<br>Salesroom and Offices, 1388 West 6th St.   | Armory    | 2        | B      |
| <b>KELLY HANDLE BAR CO., THE</b> .....<br>Office and Factory, 5017 Perkins Ave.   | Armory    | 2        | C      |
| <b>KIRK-LATTY MFG. CO., THE</b> .....<br>Bolts, Screws, Nuts and Rivets; Children's all steel<br>Express Wagons, Juvenile Automobiles, Hand Cars,<br>Wheel Goods, Etc.<br>Office and Factory, Madison Ave. near West 85th St. | Expo.     | 1        | D      |
| <b>KROEHLE'S SONS CO., THE ADAM</b> .....<br>Tanners of Oak Harness Leather.<br>Office and Tannery, Jennings Road near Denison Ave.   | Expo.     | 4        | D      |
| <b>KUHLMAN CAR CO., THE G. C.</b> .....<br>Electric and Steam Railway Cars.<br>Office and Factory, Adams Ave. at L. S. & M. S. Ry.,<br>Collinwood, Ohio.  | Expo.     | 1        | E      |
| <b>KUNDTZ, THEODOR</b> .....<br>Manufacturer of Church and School Furniture.<br>Office and Factory, Washington and Elm Sts.   | Armory    | 3        | C      |
| <b>LAMSON &amp; SESSIONS CO., THE</b> .....<br>Bolts, Nuts, Rivets, Wrenches and Wire Rope Clamps.<br>Office and Factory, 2188 Scranton Road.   | Expo.     | 1        | D      |
| <b>LANDESMAN-HIRSCHHEIMER CO., THE</b> .....<br>Ladies', Misses' and Children's Coats, Suits and Skirts.<br>Office and Factory, Corner West 9th and St. Clair Ave.  | Armory    | 1        | B      |
| <b>LEISY BREWING CO., THE ISAAC</b> .....<br>Brewers.<br>Brewery, Vega Ave. and Fulton Road, Walworth Ave.<br>and Barber Ave.<br>Office, 3324-3328 Vega Ave.  | Armory    | Gallery  | N      |
| <b>LENNOX CHEMICAL CO., THE</b> .....<br>Tire Inflating Outfits.<br>Office, 1205 East 55th St.  | Expo.     | 1        | C      |
| <b>LEONARD-BUNDY ELECTRIC CO., THE</b> .....<br>Electrical Equipment.<br>Office and Plant, 433 Champlain Ave. N. W.   | Armory    | Gallery  | E      |

|   | Building. | Section. | Aisle. |
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| <b>LIKLY &amp; ROCKETT TRUNK CO., THE</b> .....<br>Trunks, Traveling Bags and Leather Goods.<br>Office and Salesroom, 405 Superior Ave. N. W.   | Armory    | 1        | A      |
| <b>LINCOLN ELECTRIC CO., THE</b> .....<br>Alternating and Direct Current Motors and Generators;<br>Long Pull Solenoids for all Currents and Frequencies,<br>Lifting Magnets and Voltage Regulators.<br>Office and Factory, East 38th St. and Kelley Ave.                                  | Expo.     | 4        | B      |
| <b>LINCOLN MOTOR WORKS CO., THE</b><br>(See Reliance Electric & Engineering Co.)  |           |          |        |
| <b>LOEW MANUFACTURING CO., THE</b> .....<br>Brewers' and Bottlers' Machinery, Filters, Feed Water<br>Heaters, Steam Specialties, Brass and Iron Foundry,<br>Pipe Threading Machinery, Marine and Automobile<br>Gasoline Engines.<br>Office and Factory, Madison Ave. corner West 90th St. | Expo.     | 1        | D      |
| <b>LUCAS MACHINE TOOL CO.</b> .....<br>Machine Tools; "PRECISION" Horizontal Boring, Drill-<br>ing and Milling Machines; Lucas Patent Power Forcing<br>Presses.<br>Office and Factory, East 99th St. N. E. and L. S. &<br>M. S. Ry.   | Expo.     | 4        | B      |
| <b>McALLISTER CO., THE W. B.</b> .....<br>Contractors and Builders.<br>Office, 2165 East 31st St.   | Expo.     | 2        | D      |
| <b>McCLEAN ARMS &amp; ORDNANCE CO., THE</b> .....<br>Rapid Fire and Machine Guns.<br>Factory, 113 St. Clair Ave., Cleveland.<br>Salesrooms, 29 Broadway, New York City.<br>Main Offices, 227-235 Williamson Bldg.   | Expo.     | 2        | C      |
| <b>McTAGUE ROYAL COLD CREAM CO.</b> .....<br>Toilet Preparations.<br>Office, 746 Euclid Ave.  | Armory    | Gallery  | E      |
| <b>MANNEN &amp; ESTERLY CO., THE</b> .....<br>Sheet Metal Goods, Plain and Decorated Cans, Japanning,<br>"Manest" Laundry Dryers, "Manest" Natural Gas<br>Furnaces, Dust Separators, Exhaust and Blow Pipe<br>Work.<br>Office and Factory, 2241-2247 St. Clair Ave.                       | Armory    | 1        | A      |
| <b>MARBLE CHAIR CO., THE B. L.</b> .....<br>Fine Office Chairs and Rockers.<br>Salesrooms, Grand Rapids, Mich., New York City.<br>Main Office and Factory, Bedford, Ohio.   | Armory    | 3        | C      |
| <b>MARBLE &amp; SHATTUCK CHAIR CO., THE</b> .....<br>Chairs; High Grade Dining and Office Chairs, Bedroom<br>and Cafe Chairs.<br>Salesrooms, New York and Chicago.<br>Main Office and Factory, Foster Ave. near Doan St. and<br>L. S. & M. S. Ry.   | Armory    | 2        | C      |



|   | Building. | Section. | Aisle. |
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| <b>MARTIN-BARRISS CO., THE</b> .....<br>Importers and Manufacturers of Mahogany, Native<br>Cabinet Woods and Veneers.<br>Office, Yard and Saw Mill, 2048 West 3rd St.   | Expo.     | 2        | D      |
| <b>MASEK GLUE CO., C.</b> .....<br>Glue.<br>Factory, 4076 Jennings Road.<br>Office, 1320 Denison Ave.   | Expo.     | 3        | B      |
| <b>MAYER, GEORGE</b> .....<br>Picture Frames, Antique and Regilding.<br>Office and Shop, 1841 Euclid Ave.   | Armory    | Gallery  | W      |
| <b>MECHANICAL RUBBER CO., THE</b> .....<br>Belting, Packing, Hose, Molded Goods, Cotton Hose,<br>Druggists' Sundries.<br>Office and Works, C. & P. Ry. near junction Nickel<br>Plate R. R.  | Expo.     | 3        | A      |
| <b>MINOR &amp; CO., W. E.</b> .....<br>Minor's Fluid; Dip-disinfectant; Insecticide.<br>Office and Factory, 800 Long Ave.   | Armory    | Gallery  | E      |
| <b>MOORE CO., BENJAMIN</b> .....<br>Paints.<br>Office and Factory, 1322 Marquette Ave.  | Expo.     | 3        | B      |
| <b>MORREAU GAS FIXTURE MFG. CO., THE</b> .....<br>Electric and Gas Lighting Fixtures.<br>Factory, 1303 Oregon Ave.<br>Office and Salesroom, 2147 East 9th St.   | Armory    | 3        | C      |
| <b>NATIONAL-ACME MFG. CO., THE</b> .....<br>Makers of the "ACME" Automatic Multiple Spindle Screw<br>Machine; Set Screws, Cap Screws, Studs, Coupling<br>Bolts, Steel Nuts, Castellated Finished and Semi-<br>Finished Hexagon Brass Nuts, Taper Pins and Special<br>Milled Work from Steel, Iron or Brass.<br>Branch Offices, New York, Boston, Chicago and Atlanta.<br>Foreign Representatives, A. H. Schutte and Schuchardt &<br>Schutte.<br>Factory and Main Office, Stanton Ave. and C. & P. Ry. | Expo.     | 4        | C      |
| <b>NATIONAL CARBON CO.</b> .....<br>Electric Light Carbons, Wet and Dry Batteries; Carbon<br>Brushes, Carbon Electrodes.<br>Office and Factory, Corner Madison and Highland Ave.,<br>Lakewood, Ohio.  | Armory    | 3        | B      |
| <b>NATIONAL IRON &amp; WIRE CO., THE</b> .....<br>Structural and Builders' Iron Work, Joist Hangers, Etc.<br>Office and Works, 3901-3911 Hamilton Ave.  | Expo.     | 3        | A      |
| <b>NATIONAL MALLEABLE CASTINGS CO., THE</b> .....<br>Malleable Iron and Steel Castings.<br>Works, Chicago, Indianapolis, Toledo, Sharon, Pa.<br>General Office and Works, 7706 Platt Ave. S. E., near<br>C. & P. Ry. and Woodland Ave.  | Expo.     | 2        | D      |

|   | Building. | Section. | Aisle. |
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| <b>NATIONAL SAFE &amp; LOCK CO., THE</b> .....<br>Fire and Burglar Proof Safes, Vault Linings and Vestibules, Safety Deposit Boxes.<br>Office, Salesroom and Factory, 2341 East 69th St., at C. & P. Ry. between Central and Quincy.                      | Expo.     | 1        | D      |
| <b>NATIONAL SCREW &amp; TACK CO., THE</b> .....<br>Steel, Iron and Brass Wood Screws, Machine Screws, Spring Cotters and Keys, Rivets, Bolts and Nuts.<br>Office and Factory, 7413 Stanton at C. & P. Ry.   | Expo.     | 2        | A      |
| <b>NATIONAL TICKET CO., THE</b> .....<br>Tickets.<br>Office and Factory, 205 St. Clair Ave.   | Expo.     | 2        | B      |
| <b>NATURAL GAS REGULATOR CO.</b> .....<br>Gas Regulators and Gas Water Heaters.<br>Office and Factory, 5015 Luther Ave.   | Expo.     | 2        | A      |
| <b>NAUMANN, G. M.</b> .....<br>Florist.<br>Office, 1633 East 105th St.  | Expo.     | Wing     |        |
| <b>NEWBURGH BRICK &amp; CLAY CO., THE</b> .....<br>Bricks.<br>Plant, Willow, Ohio.<br>Offices, 406 American Trust Bldg.   | Expo.     | 3        | D      |
| <b>NICHOLSON SHIP LOG CO., THE</b> .....<br>Nicholson Recording Ship Log; Range Finder; Direction Indicator; Electric Revolution Counter.<br>Offices, Cleveland, Philadelphia, San Francisco, Kingston, Ont.<br>Cleveland Office, 409 Superior Ave. N. W. | Armory    | Gallery  | W      |
| <b>NICOLA, STONE &amp; MYERS CO., THE</b> .....<br>Lumber.<br>Yards, 2146 West 3rd St.<br>Offices, 716 Hickox Bldg.   | Armory    | 3        | B      |
| <b>OHIO BLOWER CO., THE</b> .....<br>Automobile Sheet Metal Parts, "Swartwout" Steam Specialties, Dust Collecting Systems, Hot Blast Heating and Ventilating.<br>Offices, 324 Prospect Ave. N. W.   | Expo.     | 3        | A      |
| <b>OHIO BOXBOARD CO., THE</b> .....<br>Fibre Shipping Cases.<br>Office and Factory, 1390-1410 East 30th St.   | Armory    | 4        | A      |
| <b>OHIO BRUSH CO.</b> .....<br>Brushes, Brooms.<br>Office and Factory, 2635 East 68th St.   | Expo.     | 3        | D      |
| <b>OHIO CERAMIC ENGINEERING CO., THE</b> .....<br>Concrete Mixers, Industrial Cars, Buckets, Clay Working Machinery.<br>Office and Plant, Berea Road near Highland Ave., Lakewood, Ohio.  | Expo.     | 4        | A      |

|  | Building. | Section. | Aisle. |
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| <b>OHIO CLAY CO., THE</b> .....<br>Bricks,<br>Plant, Willow, Ohio, B. & O. Ry.<br>General Offices, 1335-1337 Schofield Bldg.   | Expo.     | 3        | D      |
| <b>OHIO RUBBER CO., THE</b> .....<br>Mechanical Rubber Goods, Leather and Canvas Belting,<br>Mill Supplies, Water-Proof Clothing, Rubber Foot-<br>wear, "Klingtite" Gas Tubing and Bath Sprays.<br>Offices, Cleveland, Cincinnati.<br>General Offices, Cleveland—725-727 St. Clair Ave. N. W.<br>Branch—2048 9th St. S. E. | Expo.     | 3        | A      |
| <b>OHIO SPRING BED CO., THE</b> .....<br>Sole Mfrs. "The Buckeye Line" Woven Wire Mattresses,<br>All Steel Spring Beds, Steel Davenport, Couches,<br>Cots and Woven Wire and National Fabrics, Etc.<br>Office and Factory, 1281 East 38th St.  | Armory    | 3        | C      |
| <b>OHIO VARNISH CO., THE</b> .....<br>Chi-Namel; Fine Varnishes, Japans, Etc.<br>Factory, 3143-3151 East 87th St.<br>Main Office, 8604 Kinsman Road.   | Expo.     | 3        | C      |
| <b>ORAM, JOHN S.</b> .....<br>* Stave, Heading and Barrel Machinery.<br>Office and Factory, 1324 East 53rd St. corner Hamilton<br>Ave.   | Expo.     | 4        | C      |
| <b>OSBORN CO., THE J. M. &amp; L. A.</b> .....<br>Tin Plate, Sheet Iron, Metals, Tanners, Roofers and Fur-<br>nace Men's Supplies.<br>Office and Factory, 1047 Superior Ave.   | Expo.     | 3        | A      |
| <b>OSBORN MFG. CO, THE</b> .....<br>Brushes, Brooms, Foundry Supplies, Hardware Special-<br>ties.<br>Factories, Cleveland and New Durham, N. H.<br>Office and Factory, 5401 Hamilton Ave.  | Expo.     | 3        | A      |
| <b>OTIS LITHOGRAPH CO., THE</b> .....<br>Commercial, Theatrical and Circus Posters, Booklets,<br>Hangers, Labels, Stationery and General Lithographing<br>of the Highest Class.<br>Caxton Bldg.  | Armory    | Gallery  | Bridge |
| <b>OWEN CO., THE D. T.</b> .....<br>The Owen Daven-o.<br>Office and Factory, Doan Ave. at N. Y., C. & St. L.<br>Ry., East Cleveland.   | Armory    | 3        | C      |
| <b>PARISH &amp; BINGHAM CO., THE</b> .....<br>Cold Pressed Steel and Metal Stampings, Pressed Steel<br>Automobile Frames, Stamped Steel Sprockets.<br>Office and Factory, 5363 Hamilton Ave.   | Expo.     | 2        | C      |
| <b>PATTON MFG. CO., THE H. F.</b> .....<br>Projecting Lanterns and Lantern Slides.<br>Office and Factory, 2853 Detroit Ave.  | Armory    | Gallery  | W      |

|  | Building. | Section. | Aisle. |
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| <b>PECK, STOW &amp; WILCOX CO., THE</b> .....<br>Mechanics' Hand Tools, Tinsmiths' Machines, Builders'<br>and General Hardware.<br>Works, Southington, East Berlin, Plantsville, Ct., and<br>Cleveland.<br>New York Warerooms, 27 Murray St.<br>Cleveland Office and Factory, West 3rd St. corner Cuya-<br>hoga Ave. | Expo.     | 2        | B      |
| <b>PEERLESS MOTOR CAR CO., THE</b> .....<br>High Grade Motor Cars.<br>Office and Factory, 93rd St. and Quincy Ave.   | Expo.     | 2        | C      |
| <b>PENTON PUBLISHING CO., THE</b> .....<br>Publishers.<br>Offices, 2182 East 9th St.   | Expo.     | 3        | A      |
| <b>PERFECTION SPRING CO., THE</b> .....<br>High Grade Vehicle Springs of Every Description.<br>Office and Factory, 2414 Superior Ave. N. W.  | Expo.     | 4        | A      |
| <b>PFAFFMAN EGG NOODLE CO., THE</b> .....<br>Climax Egg Noodles and Macaroni.<br>Office and Factory, 6919 Lorain Ave.  | Expo.     | Wing     |        |
| <b>PIERCE &amp; CO., S. L.</b> .....<br>Ladies', Misses', Children's and Infants' Shoes. Boys',<br>Youths' and Little Gents' Welts, McKays and Turns.<br>Office and Factory, 1239-1251 West 3rd St.  | Armory    | 1        | A      |
| <b>PILSENER BREWING CO., THE</b> .....<br>Brewers of Extra Pilsener Beer.<br>Office and Brewery, corner Clark and Gordon Aves.   | Armory    | Gallery  | N      |
| <b>PIONEER MANUFACTURING CO., THE</b> .....<br>Paints and Specialties.<br>Offices, 515-517 Citizens Bldg.  | Armory    | Gallery  | W      |
| <b>POMPEIAN MFG. CO., THE</b> .....<br>Pompeian Massage Cream and Pompeian Massage Soap.<br>Office and Factory, East 4th St. and Prospect Ave.   | Armory    | 1        | A      |
| <b>PRICE ELECTRIC CO., THE</b> .....<br>Thermo-Electric and Resistance Pyrometers, Heat Regu-<br>lators, Etc.<br>Office and Works, 11807 Euclid Ave.   | Armory    | Gallery  | W      |
| <b>PRINCE, WOLF &amp; CO.</b> .....<br>Ladies' and Misses' Cloaks and Suits.<br>Office and Factory, 1248 West 3rd St.  | Armory    | 2        | B      |
| <b>PRINTZ-BIEDERMAN CO., THE</b> .....<br>Women's, Misses' and Children's Cloaks, Suits and<br>Wraps.<br>Office and Factory, West 6th St. and Lakeside Ave.  | Armory    | 2        | B      |
| <b>PROBECK, P. J.</b> .....<br>Butchers' Supplies, Fixtures and Modern Refrigerators.<br>Office and Factory, 2339-2343 East 4th St. S. E.  | Armory    | 4        | A      |
| <b>RACKLE &amp; SONS CO., THE GEO.</b> .....<br>Art Stone, Plain and Ornamental Stone Work for Build-<br>ings.<br>Office and Factory, 3147 Superior Ave.   | Armory    | 1        | B      |

|   | Building. | Section. | Aisle. |
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| <b>RAINERI, RAPHAEL</b> .....<br>Sculpture Work.<br>Studio, Murray Hill School.   | Armory    | Gallery  | E      |
| <b>RAUCH &amp; LANG CARRIAGE CO., THE</b> .....<br>Electric Carriages.<br>Office and Factory, 2180 West 25th St.<br>Salesroom and Garage, 623 Superior Ave.                       | Expo.     | 2        | C      |
| <b>RAYMOND CO., THE F. L.</b> .....<br>Pianos.<br>Office and Factory, 5213 Windsor Ave.   | Armory    | 2        | C      |
| <b>REEVES, E. A.</b> .....<br>Nurseryman.<br>Fairmount, Ohio.   | Expo.     | Wing     |        |
| <b>RELIANCE ELECTRIC &amp; ENGINEERING CO.</b> .....<br>Electric Motors, Variable and Constant Speed Generators.<br>Office, 721 Caxton Bldg.                                      | Expo.     | 4        | B      |
| <b>REPUBLIC BELTING CO., THE</b> .....<br>Leather Specialties, Leather Belting, Power Transmission<br>Supplies, Mechanical Rubber Goods.<br>Office and Factory, 1616 West 3rd St. | Expo.     | 2        | A      |
| <b>RIESTER &amp; THESMACHER CO., THE</b> .....<br>Tin, Copper and Sheet Metal Work, Metal Spinners,<br>High Grade Cuspidors.<br>Office and Factory, 1512-1526 West 25th St.       | Expo.     | 4        | D      |
| <b>RORHEIMER STUDIOS, THE</b> .....<br>Furniture and Interior Decorations.<br>Studios and Shops, 1907-1931 9th St. N. E.  | Armory    | 3        | C      |
| <b>ROSE BROS.</b> .....<br>Artistic Wrought Iron Work.<br>Office and Works, 1293 West 6th St.   | Armory    | Gallery  | E      |
| <b>ROSENBERG, CASPER</b> .....<br>Ology Cigars.<br>Office and Factory, 1608 West 3rd St.  | Armory    | Gallery  | E      |
| <b>ROYAL PEANUT BUTTER CO.</b> .....<br>Peanut Butter, Extracted Honey.<br>Office and Works, 2354 East 9th Place.   | Expo.     | Wing     |        |
| <b>ROYCE CO., THE ABNER</b> .....<br>Flavoring Extracts, Perfumes and Toilet Requisites.<br>Office and Laboratory, 5805 Hough Ave.  | Expo.     | Wing     |        |
| <b>SANITARY CO., THE</b> .....<br>Sanitary Brass Goods, Plumbing Supplies.<br>Office, 1120 Prospect Ave., 1100 West 9th St. N. W.   | Expo.     | 2        | C      |
| <b>SAVAGE CO., THE J. B.</b> .....<br>Printers, Publishers and Blank Book Manufacturers.<br>Office and Factory, 1395 East 3rd St.   | Armory    | 4        | A      |
| <b>SAWYER BELTING CO.</b> .....<br>Stitched Canvas Belting.<br>Office and Factory, Lisbon Road at C. & P. Ry.   | Expo.     | 3        | A      |

|  | Building. | Section. | Aisle. |
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| <b>SCHAEFER CARRIAGE &amp; WAGON WORKS, GUSTAV...</b><br>Carriages and Wagons.<br>Office and Works, 4170-4180 Lorain Ave.  | Expo.     | 3        | C      |
| <b>SCHILL-REHBURG CO., THE.....</b><br>Gas Furnaces.<br>Office and Factory, 4159 Pearl St.   | Armory    | Gallery  | W      |
| <b>SCHROEDER, GUSTAVE.....</b><br>Artificial Flowers.<br>Office and Factory, 2253 Ontario St.  | Armory    | Gallery  | W      |
| <b>SCHULTZ-RUCK-DELFS SHOE CO., THE.....</b><br>Shoes.<br>Office and Factory, 3927 Clark Ave.  | Armory    | 1        | A      |
| <b>SCHUSTER CO., THE.....</b><br>Wines, Wine Vinegar and Grape Juice.<br>Office and Factory, 6312 St. Clair Ave.   | Armory    | Gallery  | N      |
| <b>SCHWARZ, HUEBSCHMAN &amp; FORNEY.....</b><br>Ladies' and Misses' Cloaks and Suits.<br>Office and Factory, 1180 West 6th St.   | Armory    | 2        | B      |
| <b>SCRIBNER &amp; LOEHR CO., THE.....</b><br>Wholesale and Manufacturing Jewelers.<br>Office, Salesroom and Factory, 2047 East 9th St.   | Armory    | Gallery  | W      |
| <b>SHATZEL, E. H.....</b><br>Decorations.<br>Office, 10309 Euclid Ave.   | Expo.     | Gallery  | N      |
| <b>SHERWIN-WILLIAMS CO., THE.....</b><br>Paints and Varnishes.<br>Office and Factory, 601 Canal Road.  | Expo.     | 2        | C      |
| <b>SMITH FOUNDRY SUPPLY CO., THE J. D.....</b><br>Foundry Engineers and Manufacturers, Design, Build<br>and Equip Complete Foundry Plants. Foundry Facings<br>and Supplies.<br>Office and Plant, corner Scranton and Carter Roads.   | Expo.     | 1        | E      |
| <b>SOLIFE MFG. CO.....</b><br>Leather Preservative.<br>Office and Factory, Roegge Bldg., 3622 Lorain Ave.  | Armory    | 1        | A      |
| <b>STANDARD BREWING CO., THE.....</b><br>Brewers of High Grade Beers.<br>Office and Brewery, 5801 Train Ave.   | Armory    | Gallery  | N      |
| <b>STANDARD DRUG CO., THE.....</b><br>Wholesale Druggists.<br>Wholesale and General Offices, 840 Bolivar Road.<br>Branches—Euclid Ave. and East 9th St., The Arcade,<br>Euclid Ave., Superior Ave. and East 9th St., 2160<br>Prospect Ave., Cedar Ave. and East 87th, 8801 Wade<br>Park Ave., Euclid Ave. and East 105th, 11211<br>Superior Ave. | Expo.     | Wing     |        |

|  | Building. | Section. | Aisle. |
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| <b>STANDARD KNITTING CO., THE</b> .....<br>Trade mark "Schmidt-Knit." Fancy Knit Goods, Sweater<br>Coats, Silk Shawls, Woolen Shawls, Knit Skirts,<br>Toques.<br>Offices, New York, Chicago, San Francisco, St. Louis<br>and Boston.<br>Main Office and Factory, 2202-2210 Superior Ave. N. E. | Armory    | 1        | B      |
| <b>STANDARD LIGHTING CO. DIV., AMERICAN STOVE CO.</b><br>"New Process" Stoves.<br>Office and Factory, Perkins Ave. at C. & P. Ry.  | Armory    | 2        | C      |
| <b>STANDARD OIL CO., THE</b> .....<br>Refined Oil and Gasoline, V. M. & P. Naptha, Stoves,<br>Lamps and Heaters, Lubricating Oils, Greases, Candles,<br>Specialties.<br>Offices, 3225 East 55th St. near Erie Ry. Crossing.  | Expo.     | 3        | C      |
| <b>STANDARD SEWING MACHINE CO., THE</b> .....<br>Sewing Machines, Power and Family.<br>Home Office and Factory, 6402 Cedar Ave.  | Armory    | 2        | B      |
| <b>STANDARD TOOL CO., THE</b> .....<br>Twist Drills, Reamers, Milling Cutters, Taps, Chucks<br>and Special Tools.<br>New York Office, 94 Reade St.<br>General Offices and Factory, 6900-6918 Central Ave.  | Expo.     | 1        | B      |
| <b>STANDARD WELDING CO., THE</b> .....<br>Seamless Steel Tube, Seamless Steel Rims and Rings,<br>Bicycle Parts, Electric Welding.<br>Office and Factory, 76th St. and Woodview Ave. N. W.  | Expo.     | 3        | D      |
| <b>STEARNS CO., THE F. B.</b> .....<br>Automobiles.<br>Office and Factory, 12963 Euclid Ave.   | Expo.     | 3        | D      |
| <b>STEEL SOCKET SHAFT END CO., THE</b> .....<br>Steel Shaft Ends.<br>Office and Works, 810 Champlain St.   | Expo.     | 4        | A      |
| <b>STERLING &amp; WELCH CO., THE</b> .....<br>Carpets, Curtains, Furniture and Interior Decorations.<br>Offices and Plant, 1225-1239 Euclid Ave.   | Armory    | 2        | C      |
| <b>STRONG, CARLISLE &amp; HAMMOND CO., THE</b> .....<br>Supplies, Tools and Machinery.<br>Office and Factory, 336-344 Frankfort Ave.   | Expo.     | 2        | A      |
| <b>SUMMERS CLEANING CO., THE D. O.</b> .....<br>Rug and Carpet Cleaning, Lace Cleaning, Dry Cleaning,<br>Dyeing; Modern Rag Rugs, Summers' Washable Rugs,<br>Rugs made from old carpets.<br>Office and Works, 6202-6220 Carnegie Ave.<br>Branch Offices, 40 The Arcade and 5807 Euclid Ave.    | Armory    | 2        | C      |
| <b>SUNSHINE CLOAK CO., THE</b> .....<br>Cloaks and Suits.<br>Office and Factory, 400 Lakeside Ave.   | Armory    | 2        | B      |
| <b>SUPERIOR CIDER &amp; VINEGAR CO.</b> .....<br>Manufacturers and shippers Superior Cider and Vinegar.<br>Office and Plant, 8013 Platt Ave.   | Armory    | Gallery  | E      |

|   | Building. | Section. | Aisle. |
|---|-----------|----------|--------|
| <b>SUPERIOR FOUNDRY CO., THE</b> .....<br>Light Grey Iron Castings and Piano Plates.<br>Office and Works, East 71st St. near Union Ave. on<br>W. & L. E. Ry.  | Expo.     | 2        | B      |
| <b>TAYLOR &amp; BOGGIS FOUNDRY CO., THE</b> .....<br>Builders' Hardware; Gray Iron Castings, Oil and Gas<br>Stoves, Dampers, Damper Clips, Hardware Specialties,<br>Electro Plating and Japanning; Wood and Metal Pat-<br>terns, Sand Sifters, Molding Machines, Furnace Lamps,<br>Hand Torches, Mail Catchers.<br>No. 1 Foundry, 1913 West 3rd St.<br>No. 2 Foundry, C. & P. Ry. near Euclid Ave.<br>Lock Department, C. & P. Ry. near Euclid Ave. | Expo.     | 4        | A      |
| <b>TELLING BROS. CO., THE</b> .....<br>Ice Cream and Caterers.<br>Office and Factory, 3833 Cedar Ave.   | Expo.     | Wing     |        |
| <b>TINNERMAN STEEL RANGE CO.</b> .....<br>Steel Ranges.<br>Office and Works, 3426 Lorain Ave.   | Armory    | Gallery  | W      |
| <b>TYLER CO., THE W. S.</b> .....<br>Tyler Double Crimped Wire Cloth and Mining Screen;<br>Tyler Ornamental Iron and Bronze Work.<br>Office and Works, St. Clair Ave. from 34th to 38th Sts.  | Expo.     | 1        | A      |
| <b>UNITED STATES DENTAL MFG. CO., THE</b> .....<br>Dental Supplies.<br>Office and Factory, 923 Starkweather Ave.  | Armory    | Gallery  | E      |
| <b>UPSON NUT CO., THE</b> .....<br>Bolts, Nuts and Carriage Hardware.<br>Works, Cleveland and Unionville.<br>Main Office, 607 Garfield Bldg.  | Expo.     | 2        | A      |
| <b>UPSON-WALTON CO., THE</b> .....<br>Cordage, Wire Rope, Blocks, Canvas, Brattice Cloth.<br>Factory, Easton, Pa.<br>Cleveland Office and Factory, 1294-1310 West 11th St.  | Expo.     | 3        | E      |
| <b>VAN DORN IRON WORKS CO., THE</b> .....<br>Fabricators of Steel Office Furniture and Fixtures, Steel<br>Shop Equipments, Structural Steel, Steel Prison Con-<br>structions, House and Ornamental Iron Work, Steel<br>Timber Hangers and Steel Joist Hangers, Caps and<br>Bases.<br>Office and Salesrooms, 2685 East 79th St., near Wood-<br>land Ave. and C. & P. Ry.   | Armory    | 2        | C      |
| <b>WAGNER MFG. CO., THE</b> .....<br>Tents, Flags and Awnings.<br>Office and Factory, 5205-5209 Euclid Ave.   | Armory    | 3        | C      |
| <b>WARNER &amp; SWASEY CO., THE</b> .....<br>Machine Tools and Astronomical Instruments.<br>New York Offices, Singer Bldg.<br>Cleveland Office and Factory, 5809 Carnegie Ave.  | Expo.     | 4        | C      |



## ADDITIONAL DIRECTORY OF EXHIBITORS

|  | Building. | Section. | Aisle. |
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| <b>AUTOMATIC TYPEWRITER CO., THE</b> .....<br>The Automatic Typewriter.<br>Office, 1069 Rose Building.   | Armory    | 3        | B      |
| <b>BARRETT MFG. CO.</b> .....<br>Coal Tar Products, Roofing and Paving Materials.<br>Factories, Columbus, Cincinnati, Detroit, New York,<br>Philadelphia, Chicago, St. Louis, Pittsburgh, Min-<br>neapolis, Kansas City, New Orleans, Birmingham, Ala.,<br>Boston, London, Eng.<br>Cleveland Factory, C. C. C. & St. L. R. R. and Willey St.<br>Office, 1209-1213 Williamson Building. | Expo.     | 2        | E      |
| <b>CUMMER CO., THE JAMES W.</b> .....<br>Cleaners, Shoe Dressings and Leather Dyes.<br>Office and Plant, 2900 East 34th St.  | Armory    | Gallery  | E      |
| <b>FORBES, BENJAMIN P.</b> .....<br>Fruit Jar Wrenches, Fruit Jar Holders, Tack Pullers,<br>Household Specialties, Glasbrite Metal Polish.<br>Office, The Beckman Bldg.  | Armory    | Gallery  | E      |
| <b>GILLMORE &amp; CO.</b> .....<br>Adjustable Swinging Curtain Poles.<br>Office, 1799 Columbus Road.   | Armory    | Gallery  | E      |
| <b>MILLER KOLA TONIC CO., THE</b> .....<br>The Miller Kola Tonic.<br>Office, 3024 Lorain Ave.  | Armory    | Gallery  | E      |
| <b>OUTING OUTFIT CO., THE</b> .....<br>Portable Camping Outfits.<br>Office, 11701 St. Clair Ave.   | Armory    | Gallery  | E      |
| <b>WESTERN RESERVE VARNISH CO., THE</b> .....<br>Varnishes.<br>Office, 1251 Marquette Ave.   | Armory    | Gallery  | E      |
| <b>ZEIDLER DRUM CO., E. P.</b> .....<br>Snare Drums.<br>Office, 3602 Scovill Ave.  | Armory    | Gallery  | E      |



|  | Building. | Section. | Aisle. |
|--|-----------|----------|--------|
| WELLMAN-SEEVER-MORGAN CO., THE.....<br>Engineers and Manufacturers, Specialties—Coal and Ore<br>Handling Equipment, Open Hearth Steel Plants,<br>Hughes Mechanical Gas Producers, Rolling Mills and<br>Machinery, Metallurgical Furnaces, Etc.<br>Works, East 71st St. corner Central Ave.<br>General Offices, 7000 Central Ave. | Expo.     | 1        | A      |
| WESTINGHOUSE ELECTRIC & MFG. CO.....<br>Electrical Machinery.<br>Cleveland Office, New England Building.   | Expo.     | 4        | C      |
| WHITE, H. N. ....<br>Manufacturer of the "King" Band Instruments, Importer<br>and Dealer in Musical Instruments and Merchandise;<br>Music Publisher.<br>Office and Salesroom, 5223-5225-5227 Superior Ave.   | Armory    | Gallery  | W      |
| WHITE CO., THE .....<br>White Steam Cars.<br>Ohio Sales Department, 407 Rockwell Ave.<br>Factory, East 79th St. and St. Clair Ave.<br>Main Office, 300 Rose Bldg.  | Expo.     | 3        | C      |
| WHITE SEWING MACHINE CO., THE.....<br>Sewing Machines.<br>Factory, 707 Canal Road.<br>Wholesale Office, 300 Rose Bldg.   | Armory    | 4        | B      |
| WHITWORTH BROS. CO., THE.....<br>Printers and Publishers.<br>Office and Plant, 2182 East 9th St., Browning Bldg.   | Armory    | Gallery  | E      |
| WINTON MOTOR CARRIAGE CO., THE.....<br>Automobiles.<br>Office and Factory, Berea Road corner Madison Ave.  | Expo.     | 1        | C      |
| WORDEN TOOL CO., THE.....<br>Machine Knives.<br>Office and Factory, 1854 Scranton Road.  | Expo.     | 3        | A      |
| WYMAN & GORDON CO., THE.....<br>Drop Forgings.<br>Office and Works, 3803-3821 Superior Ave. at C. & P.<br>Ry. Crossing.  | Expo.     | 4        | A      |
| ZIMMERMAN CO., THE F. ....<br>Moldings.<br>Office and Factory, 1723 Leonard N. W.  | Armory    | 3        | C      |
| ZIPP MFG. CO., THE .....<br>Zipp's U. S. P. Flavoring Extracts, Pure Fruit Juices,<br>Crushed Fruits, Rock Candy Syrup, Etc.<br>Office and Factory, 747-751 Woodland Ave.  | Armory    | Gallery  | E      |

### SPECIAL EXHIBITORS.

CASE SCHOOL OF APPLIED SCIENCE.  
CITY OF CLEVELAND.  
CLEVELAND ENGINEERING SOCIETY, THE  
CLEVELAND PUBLIC LIBRARY.  
CLEVELAND PUBLIC SCHOOLS.  
CLEVELAND SCHOOL OF ART.  
SOCIETY FOR PROMOTING THE INTERESTS OF THE BLIND IN CLEVELAND,  
THE  
WESTERN RESERVE UNIVERSITY.  
YOUNG MEN'S CHRISTIAN ASSOCIATION.  
YOUNG WOMEN'S CHRISTIAN ASSOCIATION.

THE Exposition Committee hopes that the annexed classified list of Cleveland manufacturers will be found both useful and impressive—useful as a medium of reference, and impressive through its magnitude and the infinite variety of products it includes.

The Committee believes that this list offers convincing proof of the statement that Cleveland makes all the necessities of life and most of the luxuries.

# CLASSIFIED LIST of CLEVELAND MANUFACTURERS

## ADDING MACHINES

Calculus Co., The  
National Adding Machine Co.

## ADDRESSING MACHINES

Cleveland Addressing Machine Co.

## AGRICULTURAL IMPLEMENTS

Empire Plow Co.

## ALUMINUM

Allyne Brass Foundry Co., The  
Standard Brass Foundry Co.

## ARCHES AND TRELLISES

Cyclone Woven Wire Fence Co., The

## ARCHITECTURAL IRON

National Iron & Wire Co.  
Tyler, W. S. Co., The

## ARMS AND ORDNANCE

McClellan Arms & Ordnance Co., The

## ART GLASS

Cleveland Window Glass & Door Co., The

## ART FIXTURES

H. & H. Art Metal & Mfg. Co.

## ART WROUGHT IRON

Rose Bros.

## ARTIFICIAL FLOWERS

Schroeder, Gustav

## ARTIFICIAL LIMBS

Cleveland Artificial Limb Co., The  
Lehman & Leigh.

## ARTIFICIAL STONE

Rackle & Sons Co., The Geo.

## ASTRONOMICAL INSTRUMENTS

Warner & Swasey Co., The

## AUTOMATIC SCREW MACHINES

National-Acme Mfg. Co., The

## AUTOMATIC STAMPING MACHINES

Automatic Stamping Machine Co., The

## AUTOMETERS

Sterling Mfg. Co.

## AUTOMOBILES

Baker Motor Vehicle Co., The  
Brook Carriage & Wagon Co., The  
Cuyahoga Motor Car Co., The  
Gaeth Auto Co., The  
Peerless Motor Car Co., The  
Rauch & Lang Carriage Co., The  
Royal Motor Car Co., The  
Stearns, F. B. & Co., The

White Co., The

Winton Motor Carriage Co., The

## AUTOMOBILE FORGINGS

Cleveland Hardware Co., The

## AUTOMOBILE FRAMES

Parish & Bingham Co., The

## AUTOMOBILE SUPPLIES

Echo Horn Co., The  
Electric Welding Products Co.  
Gabriel Horn Mfg. Co.  
Globe Machine & Stamping Co.  
Guide Motor Lamp Mfg. Co., The  
K-W Ignition Co., The  
Long-Arm System Co.  
Ohio Blower Co., The  
Parish & Bingham Co., The

## AUTO SHIELDS

B. & B. Mfg. Co.

## AWNINGS AND TENTS

Astrup Manufacturing Co., The  
Buckeye Awning & Tent Co.  
Century Awning Co.  
Hasseries, Carl  
Koubek, Jas. & Co.  
Mann, John  
Wagner Mfg. Co., The

## BAGS

Ames Bag Machine Co.  
Cleveland-Akron Bag Co., The  
Continental Paper Bag Co.

## BAKERS

Alpress, M. L.  
American Home Bakery.  
Baker, J. W.  
Baker, L. H.  
Bauzer, Michael  
Bildstein, A.  
Burkert, G. F.  
Burns-Bowe Baking Co.  
Busby, Albert E.  
Chandler & Rudd Co., The  
Cleveland Baking Co.  
Cleveland Dairy & Baking Co.  
Cuyahoga Baking Co.  
Delicatessen Bakery.  
Denly Co., The  
Dietz & Telling.  
Fleming, Emil  
Forbush, H. E.  
Fossbender, Fred  
Frist, G. J.  
Froehlich, Henry  
Furtos, L.

**BAKERS—Continued.**

Gaiser, Gottfried  
 Gee, A. R.  
 Gerlack & Christman.  
 Gilbert, H. B.  
 Gore, Chas. S.  
 Graham's Bakery.  
 Habluetzel, Martin  
 Hallm, E. F.  
 Heidinger, John J.  
 Hladik, John  
 Hough Ave. Bakery.  
 Jablonski, Anton  
 Jameson, C. R. & Co.  
 Julier Baking Co.  
 Kaase, Richard W.  
 Kaye, Frederick H.  
 Kirchner, Frank D.  
 Knoth, Frank  
 Kritzer, J.  
 Kritzer, Nathan  
 Kulp, Lyman F.  
 Lakewood Bakery.  
 Lasch, Fred  
 Laub, Henry  
 Laub, Jacob Baking Co., The  
 Liberty Home Bakery.  
 Luthardt, A. E.  
 Metzger, Herman  
 Micksch, A. C.  
 Morris Baking Co., The  
 National Biscuit Co.  
 Novak, John  
 Ohio Baking Co.  
 Oriental Baking Co.  
 Paine & Co.  
 Paris Bakery, The  
 Pelz, Edward  
 Perry Pie Bakery.  
 Pile, L. A.  
 Piskac, Joe  
 Prives Delicatessen Co., The  
 R. B. Biscuit Co., The  
 St. John, A. B.  
 Sadowski, W.  
 Schmidt, John  
 Schneider Bros. Home Baking Co.  
 Schneider, Jacob, Jr.  
 Schwebke, John C.  
 Siegel, Julius C.  
 Spang, Julius  
 Srp, Joseph  
 Star Baking Co.  
 Stone, Charles L.  
 Stranahan Bros. Co., The  
 Streitberger, Jacob  
 Strodtbeck, Wm.  
 Sykes, J. E.  
 Taylor, E. A.  
 Tournardre, P.  
 Traders' Baking Co., The

Wagner, C. C. & Co.  
 Wallace, Agnes L.  
 Walter, E.  
 Warren Road Bakery.  
 Wenz, Henry  
 Wheelock Baking Co., The  
 Wick Bros.  
 Wiehn, August  
 Woman's Home Bakery.  
 Zeeck, Otto

**BAKERS' AND CONFECTIONERS' SUPPLIES**

Blum Bros.  
 Bruce & West Mfg. Co.  
 Cleveland Bakers' & Confectioners' Supply Co.  
 Schorndorfer & Eberhard Co., The

**BAKING POWDER**

Schorndorfer & Eberhard Co., The  
 Schneider, E. Co., The

**BALL BEARINGS**

American Ball Bearing Co., The

**BAND INSTRUMENTS**

White, H. N.

**BAR FIXTURES**

Huberty, Geo.  
 National Fixture Co.

**BARBERS' SUPPLIES**

Herold Bros. Co., The  
 Pompeian Mfg. Co., The

**BARRELS**

Arnson Barrel Co.  
 Greif Bros. Co., The  
 Hirsius, John  
 Welti, A. M. & Bro.

**BARREL MACHINERY**

Oram, John S.

**BASKETS**

Buckeye Basket Co.  
 Harrison, F. W. & Son  
 Recker, Fred

**BATTERIES**

National Carbon Co.

**BED SPRINGS**

Cleveland Wire Spring Co., The  
 Ohio Bed Spring Co., The

**BEDSTEADS**

Cleveland Brass & Iron Bedstead Co.  
 Cleveland Metallic Folding Bed Co.  
 Fanner Mfg. Co., The  
 Forest City Bedstead Co.  
 Kurtz Furniture & Mfg. Co.  
 Ohio Spring Bed Co., The  
 Owen, D. T. Co., The

### BEER PUMPS AND FAUCETS

Bishop & Babcock Co., The  
Cleveland Faucet Co., The  
Loew Mfg. Co., The

### BELTING

American Fabric Belting Co., The  
Cleveland Belting & Machinery Co.  
Kenehan Steel Belt Fastener Co., The  
Mechanical Rubber Co., The  
Ohio Rubber Co., The  
Republic Belting Co., The  
Sawyer Belting Co.  
Whitlock Mfg. Co., The  
Williams, R. A. Co.

### BLOWERS

Ohio Blower Co.

### BOATS

Cleveland Auto Boat Mfg. Co., The

### BOILER COMPOUNDS

State Manufacturing Co.

### BOILERS

Cleveland Steam Boiler Works.  
Connelly, D. Boiler Co., The  
Cuyahoga Boiler Works.  
Farasey Co., J. D.  
Fix's Sons, S.  
Lake Erie Boiler Works.  
Murphy & Donnelly Boiler Co.  
Teachout, H. E., Boiler Works.  
Variety Iron & Steel Works Co.

### BOLT AND NUT

Acme Machinery Co., The  
Atlas Bolt & Screw Co., The  
Bettcher Mfg. Co.  
Bourne & Knowles Mfg. Co.  
Champion Rivet Co., The  
Cleveland Bolt & Mfg. Co.  
Cleveland Cap Screw Co., The  
Columbia Bolt & Forging Co.  
Ferry Cap & Set Screw Co., The  
Kirk-Latty Mfg. Co., The  
Lamson & Sessions Co., The  
National-Acme Mfg. Co., The  
National Screw & Tack Co., The  
Upton Nut Co.

### BOOK BINDERS

Brooks Co., The  
Cleveland Book Bindery Co.  
Commercial Bookbinding Co., The  
Forest City Book Binding Co., The  
Goodaire Bros.  
Gurney Bros.  
Haker, J. & F.  
Hoppinger, J. J. Co.  
Independent Bindery.  
McKim, C. S. Co., The  
Pelz, A. H.

Prihoda, B. F.  
Steffen, Geo. W.

### BOXES

Acme Box & Lumber Co., The  
American Box Co., The  
Banner Box Co.  
Buckeye Box Co.  
City Box Co.  
Cleveland Box Co.  
Cleveland Paper Box Co.  
Dunn, James Co., The  
Forest City Box Factory.  
Grossman Paper Box Co., The  
Hahn, J. N. Co., The  
Ideal Paper Box Co., The  
K. D. Box & Label Co.  
National Box Co.  
Ohio Box & Cooperage Co., The  
Ohio Boxboard Co., The  
Peerless Paper Box Mfg. Co., The  
Saginaw Bay Box Co., The  
Smeed Box Co.  
Valley Box Co.

### BRASS AND COPPER

Acme Brass Works.  
Aetna Brass Mfg. Co., The  
American Brass Mfg. Co., The  
Atlas Brass Mfg. Co., The  
Buckeye Brass Foundry.  
Central Brass Mfg. Co., The  
Cleveland Brass Works.  
Cleveland Bronze & Brass Works.  
Elgin Brass Co.  
Empire Brass Mfg. Co.  
Farnan's Brass Works.  
Forest City Brass Mfg. Co.  
Glauber Brass Mfg. Co.  
Jones, George G.  
Ohio Brass & Iron Mfg. Co., The  
Regar Co., The  
Rickersberg Brass Co., The  
Russ, A. E. Co.  
Tyler Co., The, W. S.  
U. S. Bronze Co., The  
United Brass Mfg. Co.  
Weber, L. A. & Co.

### BRASS FOUNDRIES

Allyne Brass Foundry Co., The  
Brookside Brass Foundry, The  
Buckeye Brass Foundry.  
City Brass Foundry Co., The  
Ideal Bronze Co., The  
Loew Mfg. Co., The  
National Bronze & Aluminum Foundry Co.  
Standard Brass Foundry Co., The

### BEER

Beltz, Carl E.  
Cleveland & Sandusky Brewing Co.  
Cleveland Home Brewing Co.

**BEER—Continued.**

Dieboldt Brewing Co.  
 Excelsior Brewing Co.  
 Forest City Brewing Co.  
 Gavigan, Patrick  
 Gund Brewing Co., The  
 Keys, Daniel H.  
 Leisy Brewing Co., The Isaac  
 Pilsener Brewing Co., The  
 Standard Brewing Co., The

**BREWERS AND BOTTLERS**

Gund Brewing Co., The  
 Leisy Brewing Co., The Isaac  
 Pilsener Brewing Co., The  
 Standard Brewing Co., The

**BRICKS**

Barkwill Brick Co., The  
 Barkwill & Bradley.  
 Brookside Brick Co., The  
 Cleveland Brick & Clay Co.  
 Cullen Bros.  
 Dawson & Carder.  
 Deckman-Duty Brick Co., The  
 Duty, Andrew  
 Eggers, Brick Co., The  
 Farr Brick Co.  
 Forest City Brick Co., The  
 Gynn, Geo. H.  
 Harrison, Wm. H.  
 Hydraulic-Press Brick Co.  
 Knauff & Esterbrook.  
 Lakewood Brick Co.  
 Metropolitan Paving Brick Co.  
 Newburg Brick & Clay Co., The  
 Ohio Clay Co., The  
 Rush, John B.  
 Shepard, J. J.  
 Standard Brick Co.  
 Stowe-Fuller Co., The  
 Talamini, E. & Co.  
 Towle Brick Co., The  
 Wilson, John

**BREWERS' AND BOTTLERS' MACHINERY**

Loew Mfg. Co., The

**BRIDGES**

King Bridge Co.

**BROOMS AND BRUSHES**

Bohn, N. & Co.  
 Buckeye Broom Mfg. Co.  
 Carter, Robert I. & Co.  
 Carter, Walter J.  
 Eychik, S.  
 Fish Brush Factory.  
 Galton Mfg. Co.  
 Goodsell, E. S. & Co.  
 Herold Bros. Co.  
 Huband, August S.  
 McEntee, Daniel

Ohio Brush Works.  
 Osborn Mfg. Co., The

**BUCKETS**

Ohio Ceramic Engineering Co., The

**BUILDERS' SUPPLIES**

American Sawdolet Co.  
 Barrett Mfg. Co.  
 Cleveland Concrete Building Block Co.  
 Duplex Hanger Co.  
 Lakewood Building Block Co.  
 Peck, Stow & Wilcox Co.  
 Rackle & Sons Co., The Geo.  
 Taylor & Boggis Foundry Co., The  
 Waterproof Cement Block Co.

**BURIAL CASES**

Cleveland Burial Case Co., The

**BURLAP**

Cleveland-Akron Bag Co., The

**BURNING BRANDS**

Cleveland Steel Stamp Works.  
 Dickey, A. H.

**BUTCHERS' SUPPLIES**

Cleveland Butchers' Supply Co.  
 Cleveland Meat Chopper Co.  
 Probeck, P. J.

**BUTTONS**

Cleveland Pearl Works Co., The

**BUTTON HOLES**

Greenbaum, Marcus

**CABINET MAKERS**

Cleveland Grill & Mfg. Co.  
 Kundtz, Theodor

**CALCULATING MACHINES**

Calculus Co., The

**CANDLES**

Mannen & Esterly Co., The  
 Standard Oil Co., The

**CANDY**

Chandler & Rudd Co., The  
 Co-Co Candy Co., The  
 Heisel, G. L.  
 Humphrey Co., The  
 Jewell, M. F.  
 Lovell, M. T.  
 Mackenzie, Robt. F. Co.  
 McMahon & Troughton.  
 Narwold, C. F. Co., The  
 New England Pop Corn & Candy Co.  
 Nimberger-Hahn Co.  
 Phelps, J. H. & Co.  
 Swetland & Sons Co., The  
 United States Candy Co.  
 Wuest-Bauman-Hunt Co., The



### CANNED GOODS

Haserot Co., The

### CANS

American Can Co.  
Hull Can Co., The

### CANVAS

Upson-Walton Co., The

### CARBONATORS

Bishop & Babcock Co., The  
Cleveland Faucet Co., The

### CARS AND SUPPLIES

Atlas Car & Mfg. Co., The  
Chicago-Cleveland Car Roofing Co.  
Chisholm & Moore Mfg. Co., The  
Cleveland Car Co., The  
Cleveland Car Specialty Co.  
Cleveland Frog & Crossing Co., The  
Kuhlman, G. C. Car Co.  
National Car Wheel Co.  
National Malleable Castings Co., The  
Ohio Ceramic Engineering Co., The  
Standard Car Wheel Co.

### CAR ROOFERS

Chicago-Cleveland Car Roofing Co.

### CARBON

National Carbon Co.

### CARBORUNDUM

Carborundum Co., The

### CARPETS AND RUGS

Cleveland Rug Mfg. & Carpet Cleaning Co.  
Fuller Carpet Cleaning & Rug Mfg. Co., The  
Kiefer Carpet Cleaning & Rug Works.  
Oriental Rug Repair & Cleaning Co.  
Owen Carpet Cleaning Co.  
Summers, D. O. Cleaning Co., The  
Weil, A. M.  
West Side Carpet Cleaning & Rug Co.

### CARRIAGE AND WAGON HARDWARE

Cleveland Hardware Co., The  
Upson Nut Co., The

### CARRIAGES, WAGONS AND SUPPLIES

Bennhoff Bros.  
Bennhoff, John  
Black, P. F. Co.  
Boyer & Korell.  
Braun, Lorenz  
Broc Carriage & Wagon Co., The  
Cleveland Hardware Co., The  
Cleveland Vehicle Exchange.  
Coath, Geo. H.  
Cray Bros.  
Doering, Louis P.  
Eberhard Mfg. Co., The  
Ferrell Brake & Mfg. Co., The

Fox Bros.  
Franz, Fred  
Gabriel W. H., Carriage & Wagon Co., The  
Gohde, Louis,  
Gormsen, J. & Co.  
Haas, M., Jr.  
Hanger, C. F., Carriage Co.  
Harm Carriage & Wagon Co.  
Hoffman, Wm. G.  
Johns, John C.  
Kimpel Bros.  
Koob & Mertz.  
Krill, Peter  
Leader Buggy & Supply Co.  
Lehr, Geo. P.  
Manz, Matt  
Meng, John L.  
Mizner, C. F.  
O'Brien, John  
Olson, John  
Olstyn, T.  
Perfection Spring Co., The  
Philips, Frank, Carriage Co.  
Price Bros. Carriage Co.  
Rauch & Lang Carriage Co., The  
Rogers & Wilson.  
Rohs, Henry & Son.  
Schaefer Carriage & Wagon Works, Gustav  
Schmidt & Schuster.  
Schoonard & Dulin.  
Scranton Avenue Carriage & Wagon Works.  
Sebastian, Louis F.  
Shaffrank, J. H.  
Stadler, J. L. & H.  
Stahli, Ernest  
Standard Carriage & Wagon Co., The  
Standard Top & Equipment Co.  
Steel Socket Shaft End Co.  
Thompson, John F.  
Vaughn, Geo. A.  
Warden, Geo. J. & Co.  
Warnsman, Henry F.  
Wigand, John & Son.  
Woltman Carriage & Wagon Co., The  
Young, E. J.  
Zettelmyer & Walker.  
Zimmerman, F. W. & Co.

### CASTINGS

Chisholm & Moore Mfg. Co., The  
National Malleable Castings Co., The  
Superior Foundry Co., The  
Taylor & Boggis Foundry Co., The

### CEILINGS, METAL

Callaghan, J. & Son.  
Cleveland Metal Roofing & Ceiling Co., The  
National Cornice & Ceiling Co.

### CEMENT BLOCKS

Central Concrete Block Co.  
Lapham, R. S.

### CHAIN HOISTS

Chisholm & Moore Mfg. Co., The  
Dunn, James P.

### CHAINS

Cleveland Chain & Mfg. Co., The  
Round, David & Son  
Woodhouse, Samuel

### CHAIRS AND SEATS

Faulhaber Church Furniture Co., The  
Favorite School Desk Co., The  
Marble Chair Co., The B. L.  
Marble & Shattuck Chair Co., The  
McHugh, P. A.

### CHEESE

Cleveland Cream Cheese Co., The

### CHEMICALS

Alpine Pharmacal Co.  
Barrett Mfg. Co.  
Be Saw Chemical Co.  
Campbell, W. H. & Co.  
Charmene Chemical Co.  
Cremer & Case.  
Crobaugh, Frank L.  
Crowell & Murray.  
Emmerton, F. A.  
Federal Refractories Co., The  
Feil, S. R. Co., The  
French Renovating Co.  
Gebauer Chemical Co.  
General Chemical Co.  
German Chemical & Mfg. Co.  
Grasselli Chemical Co., The  
Hannum Laboratory, The  
Harshaw, Fuller & Goodwin Co.  
Kessler Co., The  
Lennox Chemical Co., The  
Medical Chemical Laboratory.  
Merit Chemical Co.  
Ozark Mfg. Co.  
Peck, Francis J. & Co.  
Strong, Cobb & Co.  
U. S. Chemical Co.

### CHEWING GUM

American Chiclé Co., The

### CHINA CEMENT

Isaacson, S. B.

### CHOCOLATE AND COCOA

Cleveland Chocolate & Cocoa Co.  
Forbes Chocolate Co.

### CHURCH FURNITURE AND SUPPLIES

Faulhaber Church Furniture Co.  
Kundtz, Theodor

### CIDER AND VINEGAR

Superior Cider & Vinegar Co.

### CIGARS

Abrams, C. S. & Co.  
Albert, Gregor  
Altenbernd, Carl  
American Cigar Co.  
Amidon, Wm. J.  
Amster, Samuel  
Aring, Fred  
Arlington Cigar Co.  
Arnold, Albert

Barcikowski, John  
Barth, Gottfried  
Baskind, Abram  
Bauer, M. F.  
Belzer, Henry  
Berger Bros.  
Berger, Charles  
Besuner, Samuel  
Beznoska, Barney W.  
Bissinger, Wm. F.  
Boesger, Edw. E.  
Boesger, H. A.  
Bolasny Bros.  
Borges, Julius H.  
Bothe, Christ  
Brackman, Elias  
Brand, Frederick  
Brannigan, Thos. & Co.  
Braun, Lucas  
Brinkman, Henry  
Brisky, Wm. C.  
Brown, Henry  
Brudno Stogie Co.  
Brun, Charles  
Buenker, Wm.  
Buennicke, Charles  
Burk, John H.  
Burstein Bros.

Canda, John A.  
Central Cigar Co.  
Century Cigar Co.  
Cleveland Cigar Co.  
Cleveland Co-Operative  
Cigar Co.  
Cohn, Bert  
Collins, Wm. P.  
Conrad, James J.

Dattelbaum, Fred J.  
De Arango, Christiana  
Deger, Frank  
Delfs, Julius  
Dellenbaugh Cigar Co.  
Desberg, Daniel  
Dluhopolcek, Frank  
Dluhopolcek, James J.  
Dluhopolcek, John  
Dobscha, Frank  
Dorfman, Peter

CIGARS—Continued.

Ebert, Paul  
 Edelman, Wm.  
 Eichhorn, Geo. A.  
 Eisner, Jacob  
 Emma Cigar Co.  
 England & Kraft.  
 Eppele, Malchior  
 Epstein & Siegel.  
 Epstein, Hyman  
 Erb, Leo

Faist, Chr. G.  
 Faulhaber, Frank J.  
 Feder, Marcus Cigar Co.  
 Feger, Julius  
 Feinstein, Chas.  
 Feldman, Philip H.  
 Feldman, Wm.  
 Fellman, John  
 Fessenmeyer, Albert  
 Fleet Street Cigar Co.  
 Fleischman, Joseph  
 Florman, Aaron  
 Fox, Morris  
 Friedlander, Jacob  
 Friedman, David  
 Friedman, Henry  
 Friedman, M. & Co.  
 Frontier Cigar Co.  
 Fruchtenicht, August

Ganzer, Charles  
 Glaser, Lorenz  
 Gleckler, Michael M.  
 Gleichman, Abr.  
 Glickman, Harry  
 Goldman, Max  
 Goodfriend, David  
 Goodman, Sol.  
 Greco, John  
 Greenberg, Simon  
 Grieser, John  
 Grossman, Charles

Haas, Ignatz  
 Hain, Jacob W.  
 Hamberger Co.  
 Handte Cigar Co.  
 Hanus, John C.  
 Helms, Henry  
 Henig, Paul L.  
 Hinkley, Elza D.  
 Hively, Theo.  
 Hoeffler, Geo. A.  
 Hohnhorst, Wm.  
 Hoppe, Henry  
 Hufford, Frank  
 Hurlbut, D. D.

Israel, Kirby

Israel, Wm.

Jacobs, Jacob  
 Jaeger, Charles  
 Jaffa, Sarah  
 Jankovsky, Joseph  
 Jindra, Joseph  
 Jirberg, John

Kabat, Myer  
 Kalatzik, Joel  
 Kalovsky, Israel  
 Kaufman, Sam  
 Kaul, Charles  
 Kirchendorfer, P. J.  
 Klima, Edw.  
 Klima, John V.  
 Klinger, Peter  
 Kloepfer, Henry  
 Knaus, Chas. G.  
 Kneebusch, M. Co.  
 Koch, Herman  
 Koklanner, Fred J.  
 Kolb, Henry  
 Kolcun, Lizzie  
 Koplan, Abraham  
 Korach, Nathan  
 Koses, Rudolph  
 Krejci, Fred B.  
 Krenkel, Herman  
 Kroeger, E. F.  
 Krowarz, Paul  
 Kruse, August  
 Kruse, Bernhard  
 Kurlander, Max

Lakewood Cigar Co.  
 Lampus, Theo.  
 Lange, Henry  
 Lees, Samuel  
 Lefkovits, Ignatz  
 Leiblinger, Frank  
 Lincoln Cigar Co.  
 Lipman, Philip  
 Lobenthal, Levi  
 Loveman, Joseph  
 Lutz, Albert C.  
 Lyric Cigar Co.

McCarthy, Wm. C.  
 McDowell, R. R. & Co.  
 Majni, Barbara  
 Makrohajsky & Knotek.  
 Malinowski, Jacob  
 Mang, Peter  
 Marx, Leon  
 Mayer, Oscar  
 Meister, Harry  
 Mellor, Victor  
 Metzel, Simon  
 Michalke, Josephine

CIGARS—Continued.

Mihalovitch, Samuel  
Milkove Bros.  
Miller, Carl  
Miller, Henry  
Miller, Hyman  
Modrock, John  
Montoro, Benito  
Moritz, Harry  
Moses Cleveland Cigar Co.  
Motter, John H.  
Mount Sinai Cigar Co.  
Mueller, Adam  
Mueller, Geo. L.  
Mueller, Stephen  
Mulvaney, Wm. J.

National Cigar Co.  
Neides, Wm.  
New, Philip  
Newman, Jacob  
Newman, J. C. Cigar Co.  
Newman, Leo  
Nussbaum, Otto

Ohio Stogie Co.  
Ohlsen, Arnold  
Opatrny, Wm.  
Opitz, Gustav L.  
Ossman, John H.

Papurt Cigar Co.  
Perides Bros.  
Perkins, Fred C.  
Persky, Samuel  
Pertierra, Jose  
Phelps-Humphrey Co.  
Philippbar, Frank  
Ployhart, John  
Podoll, Carl  
Pollner, Albert O.  
Pollock, Herman  
Pollock, Julius & Co.  
Polster Cigar Co.  
Ponzio, Salvatore  
Poplowsky, Charles  
Primm, Fred H.

R. & E. Cigar Co.  
Rachel, Andrew  
Ramos, Serafin  
Reinhart, Magnus  
Reuss, Joseph  
Rieben & Williams.  
Rippner, Adolph B.  
Rippner, Louis  
Roch, John  
Rogat, Carl  
Rolshauser, Henry  
Rosenbaum, Edward  
Rosenberg, Casper

Rosenberg, Herman  
Rosenblatt, Eugene J.  
Rotenberg, Morris  
Roth, Charles  
Roth, Joseph  
Royal Blue Cigar Co.  
Rudolph, Louis C.  
Rupp, Philip

Sacewicz, Teofila  
Samitowski, Frank  
Samstag, Frederick  
Sarbin, Samuel  
Sauer, Charles  
Schade, Chas. A.  
Schaefer, Peter F.  
Schalois, Nicholas  
Scheuring, Joseph F.  
Schmidt, Oscar  
Schmoltz, Keller & Co.  
Schnell, John  
Schomer, John C.  
Schrieber, Ignatz  
Schroeder, John  
Schubert, Gustav  
Schulist, Joseph  
Schulist, Sam  
Schwartz, Kohlman  
Schwartz, Louis  
Schweitzer, Anthony F.  
Sebo, Anna  
Seleznick, Isaac  
Sey, Samuel  
Shagrin, Samuel  
Shields-Wertheim Co.  
Siegel, L. Cigar Co.  
Siegel, Maurice  
Siegel, Max  
Singer, Adolph  
S. J. C. Cigar Co.  
Skala Bros.  
Sliva, Anna  
Solberger, Arnold  
Solomon, Fred  
Sovish, Stephen  
Spira, David H.  
Spitz, Jack  
Srulinsky, John  
Star Cigar Co.  
Stedronsky, Wm. C.  
Steinberg, Isaac  
Stieglmeyer, Henry  
Stoskopf, Frederick C.  
Stotter, Louis  
Strand, Henry  
Strasser, Stephen  
Sulzman, John M.  
Swaab, Wm.  
Swirsky Bros.

Teitelbaum, Wm.

**CIGARS—Continued.**

Tengler, Edw.  
 Treuhart, E. Cigar Co.  
 Trottner, S. & Co.  
 Tucker, Hyman A.  
 Union Central Cigar Factory.  
 Union Cigar Co.

Van Sickles, Sam G.  
 Vasmit, Joseph  
 Vasquez, Pedro B.  
 Vedder, Chas. L.  
 Victor Cigar Co.  
 Viethen, Charles  
 Voss, Henry

Waelde, Otto  
 Wallack, S. & Son  
 Wandt, John  
 Ward, James  
 Warnicke, Wm. J.  
 Weiler, Frank  
 Weis, Morris Cigar Co.  
 Weisberger, Morris  
 Weisenberg, Louis  
 Weiss, Isidor  
 Weiss, Joseph M.  
 Weitzman, Meir.  
 Wenz, Philip  
 Wenzel, Frederick  
 Wertheimer, Albert  
 Wetesnik, Frank  
 Wichert, Paul H.  
 Widman, Anthony  
 Wlecke, Ernst H.  
 Wlecke, Henry  
 Wolf, Frank X.  
 Wolf, James E.  
 Wolverine Cigar Co.

Yagodzinsky, Joseph

Zima, Joseph  
 Zimmerman, Joseph  
 Zimmerman, Michael  
 Ziolkowski, Margt. A.  
 Zoelle, Jacob

**CIGAR BOXES**

Hasselo, William  
 Koklauner, Chas. F.  
 Rickersberg's Sons, L.  
 Weber, Martin E.

**CLOCKS**

American Watchman's Time Detector Co., The

**CLOTHING, CLOAKS, SUITS**

American Suit & Skirt Co.  
 Anisfield, John, Co., The  
 Bell Garment Co.

Bellamy Vestlette Mfg. Co.  
 Black, H. Co., The  
 Bloch Co., The  
 Cleveland Cloak & Suit Co., The  
 Cleveland Cloakmaking Co.  
 Cleveland Skirt Co.  
 Cohn, Goodman Co., The  
 Dielhenn Mfg. Co., The  
 Eisenman, Chas. Co.  
 Elite Skirt Co.  
 Euclid Pants Co.  
 Fellenbaum Bros.  
 Fliegel, A.  
 Freedman & Kornfeld Co.  
 Freedman Bros.  
 Freedman, M.  
 Fried Cloak Co., The  
 Green, Samuel  
 Greenbaum, M.  
 Greenhut Cloak Co., The  
 Greenwald, Jos. H.  
 Gross Co., The L. N.  
 Hamilton, Harry H., Co.  
 Hexter, B. & Co.  
 Holstein, Falk & Roth.  
 Homer, W. E. Co.  
 Imperial Skirt Co., The  
 Joseph & Feiss Co., The  
 Klein Co.  
 Klein, Leibel & Hart.  
 Klein, Lichtenstader & Co.  
 Klein, Morris & Co.  
 Kohn Bros. & Co.  
 Kohn, J. P. & Co.  
 Kohn, S.  
 Korach-Ecker Co., The  
 Korach, E. J. & Co.  
 Korach, S. & Co.  
 Landesman, Hirschheimer & Co., The  
 Lane's Garment Co.  
 Lattin, Bloomfield & Co.  
 Levy, J. H.  
 Lichtenstein & Leitner.  
 Lieberman, M. J. & Sons.  
 Lipman & Cooper.  
 Marks, Jacob  
 Meisel, J. E.  
 Miller, Cohn & Co.  
 Monarch Skirt Co.  
 Monash Cloak Co.  
 Novelty Skirt & Suit Co.  
 Paris Skirt Co.  
 Price, Weizenhof & Co.  
 Prince, Wolf & Co.  
 Printz-Biederman Co., The  
 Progress Skirt Co.  
 Reisz, Emil  
 Richman Bros. Co.  
 Sampliner, P. H. & Co.  
 Schwarz, Huebschman & Forney.  
 Silver, M. T. & Co.  
 Sonnenfield, Bleiweiss & Co.

**CLOTHING, CLOAKS, SUITS—Continued.**

Specht, Louis  
 Sperling & Greenfield.  
 Stecker, Weiner & Co.  
 Stein-Hexter Co.  
 Stern Bros. & Co.  
 Sunshine Cloak Co., The  
 Ultra Skirt Co.  
 Witkowsky's Sons, A.  
 Wolpaw, J. & Bros.  
 Woolcraft Co., The

**CLUTCHES**

Brown Hoisting Machinery Co., The  
 Davis Clutch Co., The  
 Hill Clutch Co., The  
 Williams, R. A. & Co.

**COAL AND ORE BUCKETS**

Williams, G. H. Co., The

**COAL TAR PRODUCTS**

Barrett Mfg. Co.

**COAT HANGERS**

Beatty Stamping Co.

**COMPASSES AND BINNACLES**

Morrison, Frank

**CONCRETE FLOORING**

American Sawdolet Co., The

**CONCRETE MIXERS**

Ohio Ceramic Engineering Co., The

**COOKING UTENSILS**

Avery Stamping Co., The  
 Bronson-Walton Co., The  
 Cleveland Stamping & Tool Co., The

**COOPERS**

Davis, Geo.  
 Greif Bros. Co., The  
 Hirsius, John.  
 Interstate Cooperage Co.  
 Snider, Martin  
 Welti, A. M. & Bro.

**COPPER AND STEEL ENGRAVERS**

Trade Engraving Co.

**CORDAGE**

Upson-Walton Co., The

**CORRUGATED PAPER SPECIALTIES**

Hahn Co., The J. N.

**CORSETS**

Artist Model Corset Co., The

**CORSET HOOKS**

Queen Novelty Co.

**COUCHES AND COTS**

Ohio Bed Spring Co., The  
 Owen Co., The D. T.

**CRANES AND HOISTING MACHINERY**

Brown Hoisting Machinery Co., The  
 Browning Engineering Co., The  
 Wellman-Seaver-Morgan Co., The

**CREAM SEPARATORS**

Cleveland Cream Separator Co., The

**CUTTERS**

Cleveland Twist Drill Co., The  
 Foote-Burt Co., The  
 Standard Tool Co., The

**DECORATIVE SCULPTURE**

Fischer & Jirouch.

**DENATURATED ALCOHOL**

Cleveland Industrial Distillery.

**DENTAL SUPPLIES**

Cleveland Dental Laboratory.  
 Cleveland Dental Mfg. Co., The  
 Cogswell Dental Supply Co., The  
 Consolidated Dental Mfg. Co.  
 Electric Dental Specialty Co., The  
 U. S. Dental Mfg. Co., The  
 Wilcox, Amos A.

**DESKS AND OFFICE FURNITURE**

Cleveland Desk Co.  
 Cleveland Store Fixture Co.  
 Favorite School Desk Co., The

**DIES AND SHEET METAL STAMPING**

Cleveland Metal Stamping Co., The  
 Cleveland Punch & Shear Works Co., The  
 Columbia Metal Stamping Co.  
 Globe Machine & Stamping Co., The  
 Hunt & Dorman Mfg. Co., The  
 National Mfg. Co., The

**DISINFECTANTS**

Campbell, W. H. & Co.  
 Chemical Supply Co.  
 Dayton, Wm. H.  
 Hunt Mfg. Co., The  
 Hygeno Disinfectant Co.  
 Minor, W. E. & Co.  
 Prescott Chemical Co.  
 West Disinfecting Co.

**DISTILLERS—FRUIT**

Busshaus, Joseph  
 Grill, Mary  
 Kekic & Popovic.  
 Rehmar, Joseph  
 Schweitz, Abram

## DISTILLERS—GRAIN

Meissner, F. & F.  
Schneider, Hermann

## DRAFTING MACHINES

Little, Charles H.

## DRESS HOOKS

Wilson Dress Hook Co., The

## DRILLS

Cleveland Punch & Shear Works Co., The  
Cleveland Twist Drill Co., The  
Standard Tool Co., The

## DRILLING MACHINES

Foote-Burt Co., The  
Lucas Machine Tool Co.

## DROP FORGINGS

Cleveland Drop Forging Co., The  
Cleveland Hardware Co.  
Park Drop Forge Co., The  
Wyman & Gordon Co., The

## DRUGGISTS' SUPPLIES

Mechanical Rubber Co., The

## DRUMS

Zeidler, E. P.

## DRYERS

Bartlett & Snow Co., The C. O.  
Anderson Co., The V. D.

## DUST ABSORBENT

Pioneer Mfg. Co., The

## DUSTERS

Cleveland Grill & Mfg. Co.

## DYERS

Cleveland Worsted Mills Co., The

## ELECTRICAL COMMUTATORS

Homer Commutator Co., The

## ELECTRIC AUTOMOBILES

Baker Motor-Vehicle Co., The  
Broc Carriage & Wagon Co., The  
Cuyahoga Motor Car Co., The  
Rauch & Lang Carriage Co., The

## ELECTRIC SUPPLIES

Adams-Bagnall Elec. Co., The  
Barr Electric Heating Co., The  
Brilliant Electric Co., The  
Bruce-Merriam-Abbott Co., The  
Buckeye Electric Co., The  
Cleveland Armature Works.  
Cleveland Electric Illuminating Co., The

Cleveland Spark Plug Co., The  
Cleveland Switchboard Co., The  
Electric Controller & Mfg. Co.  
Gardner Electric Drill & Elec. Mehry. Co.  
General Incandescent Lamp Co., The  
Hertner Electric & Mfg. Co.  
Holland, H.

Homer Commutator Co., The  
K-W Ignition Co.  
Laganke, Robt. F.  
Leonard-Bundy Electric Co., The  
Lincoln Electric Co., The  
Lincoln Motor Works, The  
National Carbon Co.  
National Electric Lamp Co.  
North Electric Co., The  
Nungesser Electric Battery Co., The  
Ohio Electric Works.  
Petre Carbureter Co.  
Price Electric Co.  
Republic Belting Co., The  
Sardo Specialty Co.  
Standard Electric Co., The  
Standard Welding Co., The  
Tregoning Electric Mfg. Co., The  
Van Dorn Electric & Mfg. Co., The  
Warner Electric Co., The  
Westinghouse Electric & Mfg. Co.  
Willard Storage Battery Co., The

## ELECTRIC WELDING

Standard Welding Co., The

## ELECTROTYPERS

Central Electrotype Foundry.  
Central Engraving Co.  
Cleveland Electrotype Co.  
Eclipse Electrotype & Engraving Co., The  
Lawrence Pub. Co., The  
L. S. & B. Illustrating Co.

## ELEVATORS

Edmunds Elevator Co.  
Kranebiel Elevator Co.  
Lasar, Walter  
O'Donnell Co., The  
O'Donnell Safety System Co., The  
Otis Elevator Co.  
Smith, C. W. Elevator Co.

## ELEVATOR CARS AND SUPPLIES

O'Donnell Co., The  
O'Donnell Safety System Co., The  
Sheer, George D. Iron Works.  
Tyler, W. S. Co., The

## EMBROIDERY

Bindau, Jos. Embroidery Co.  
Joseph, Sophia  
Korach, Jos. & Co.

## ENAMELS

Glidden Varnish Co., The

## ENAMELING AND JAPANING

Cleveland Stamping & Tool Co.  
Jeavons, A. N.  
Novelty Enameling Co., The

## ENGINES AND SUPPLIES

American Shipbuilding Co., The  
Bennett Engineering & Steam Specialty Co.  
Bissett, R. J. & Co.  
Brown Hoisting Machinery Co., The  
Browning Engineering Co., The  
Bruce-Merriam-Abbott Co., The  
Buckeye Engine Co.  
Chase Machine Co., The  
Clay, E. H. & Co.  
Cleveland Belting & Machinery Co.  
Cleveland Mfg. & Supply Co.  
De Mooy Bros.  
Foos Gas Engine Co., The  
Garlock Packing Co., The  
Gas Machinery Co., The  
K-W Ignition Co.  
Kilby Mfg. Co., The  
Republic Belting Co., The  
Schettler, C. A. & Co.  
Wellman-Seaver-Morgan Co., The

## ENGRAVERS AND EMBOSSERS

Abrecht & Schweikart.  
Beattie & Son.  
Burrows Bros. Co., The  
Caxton, Co., The  
Central Electrotype Foundry.  
Central Engraving Co.  
Cleveland Electrotype Co.  
Cleveland Engraving Co.  
Corday & Gross Co., The  
Crummel & Co.  
Dickey, A. H.  
Eclipse Electrotype & Engraving Co., The  
Fleharty, J. H. & Co.  
Hall, Thompson & Schmidt.  
Korner & Wood Co., The  
L. S. & B. Illustrating Co.  
Morgan, J. H. & Co.  
Mugler Engraving Co.  
Newmeyer, W. L.  
Rogers & Rickesheiser.  
Snider, Charles E.  
Trade Engraving Co.

## ENVELOPE MANUFACTURERS

Wolf Envelope Co., The

## EXTRACTS AND PERFUMES

Beck, F. A., Extract Co.  
Knapp, J. W.  
Ridgeville Mfg. Co.  
Royce, Abner Co., The  
Royce, W. D.  
Zipp Mfg. Co., The

## FACING BRICK

Hydraulic-Press Brick Co.

## FAUCETS

Bishop & Babcock Co., The  
Cleveland Faucet Co., The

## FENCES

American Steel & Wire Co.  
Anchor Fence & Mfg. Co., The  
Brown Fence & Wire Co., The  
Cleveland Fence Machine & Wire Co.  
Crane Spring Steel Fence Co.  
Cyclone Woven Wire Fence Co., The  
Frost Wire Fence Co.  
Lindsay Fence Co.  
National Iron & Wire Co.  
Sheer Bros. Fence & Iron Co., The  
Sheer, Geo. D. Iron Works, The  
Superior Wire Fence Co.  
Van Dorn Iron Works Co., The  
Weber Iron & Fence Works.  
Zeman Iron Works, Co., The

## FERTILIZER MANUFACTURERS

American Agrl. Chemical Co.  
Anderson, V. D. Co., The  
Cleveland Dryer Works.  
Farmers Chemical & Fertilizer Co.  
Royal Fertilizer Co.  
Stadler, J. L. & H.

## FILE MANUFACTURERS

Industry File Works.  
McClellan, Wm., File Co.  
White Tool & Supply Co.

## FILLETS

Cleveland Fillet Co., The  
Cleveland Galvanizing Works Co., The

## FILTERS

Darling, Cornelius B.  
Loew Mfg. Co., The

## FIRE ESCAPES

McArthur Portable Fire Escape Co.  
Sheer, George D. Iron Works, The

## FIRE EXTINGUISHERS

Miller Chemical Engine Co.

## FIREPROOFING

Cleveland Fireproof Con. Co., The  
Hathaway, A. G. & Co.  
National Concrete Fireproofing Co., The  
National Fireproofing Co.  
Stevens Iron Works & Fireproofing Co., The

## FIREWORKS

Crescent Novelty Co.



### FLAGS

Wagner Mfg. Co., The

### FLOUR

Commercial Milling Co., The

### FLUE CLEANERS

Lamson, P. W.

### FLUE LININGS

James, Ralph T.

### FLY SCREENS

Diedricks, Carl J.

### FLUSHOMETERS

Cleveland Flushometer Co., The

### FOLDING MACHINES

Cleveland Folding Machine Co., The

### FORCING PRESSES

Lucas Machine Tool Co.

### FORGINGS

Cleveland City Forge & Iron Co.  
Cleveland Drop Forging Co., The  
Cleveland Hardware Co., The  
Cleveland Machine & Mfg. Co.  
Cleveland Steam Gauge Co., The  
Crucible Steel Forge Co.  
Horsburgh Forging Co.  
Machinery Forging Co.  
Ohio Forge Co., The  
Park Drop Forge Co., The  
Wyman & Gordon.

### FOUNDRIES

Acme Brass Works.  
Acme Foundry Co., The  
Aetna Brass Mfg. Co., The  
Allyne Brass Foundry Co., The  
American Brass Mfg. Co., The  
American Range & Foundry Co.  
American Shipbuilding Co., The  
Atlantic Foundry Co.  
Atlas Brass Mfg. Co.  
Bishop & Babcock Co., The  
Bowler Foundry Co.  
Broadway Foundry Co.  
Brookside Brass Mfg. Co.  
Buckeye Brass Foundry Co.  
Central Brass Mfg. Co., The  
City Brass Foundry Co., The  
City Foundry Co., The  
Cleveland Brass Works.  
Cleveland Bronze & Brass Works.  
Cleveland City Forge & Iron Co.  
Cleveland Faucet Co.  
Cleveland Foundry Co., The  
Cleveland Steel Casting Co.  
Clough-Baird Mfg. Co.

Cochran, J. A.  
Comstock Brass Foundry Co.  
Crescent Brass Foundry.  
Duplex Mfg. & Foundry Co.  
Eagle Brass Foundry Co.  
Empire Brass Mfg. Co., The  
Fanner Mfg. Co.  
Farnan Brass Works.  
Ferro Machine & Foundry Co., The  
Forest City Brass Mfg. Co.  
Forest City Foundry & Mfg. Co., The  
Fulton Foundry Co.  
Glauber Brass Mfg. Co.  
Hanger & Scheidegger.  
Herron, James A.  
Hill Clutch Co., The  
Horsburgh Forging Co.  
Ideal Bronze Co., The  
Interstate Foundry Co., The  
Johnston & Jennings Co., The  
Kilby Mfg. Co., The  
Loew Mfg. Co., The  
Macbeth Iron Co., The  
Madison Ave. Foundry Co.  
Monarch Brass Co., The  
Monroe Bros.  
National Malleable Castings Co.  
Ohio Brass & Iron Mfg. Co.  
Ohio Foundry Co.  
Palmer & DeMooy Foundry Co.  
Rickersberg Brass Co.  
Riverside Foundry Works.  
Semisteel Co., The  
Standard Brass Foundry Co.  
Standard Car Wheel Co.  
Standard Foundry & Mfg. Co.  
Superior Foundry Co., The  
Taylor & Boggis Foundry Co.  
United Brass Mfg. Co.  
United States Bronze Co., The  
United States Cast Iron Pipe & Foundry Co.  
Variety Iron & Steel Works Co.  
Vincent Mfg. Co., The  
Walworth Run Foundry Co.  
Weber, L. A., & Co.  
West End Brass Foundry.  
West Steel & Iron Castings Co.

### FOUNDRY EQUIPMENT

Smith Foundry Supply Co., The J. D.

### FOUNDRY SUPPLIES

Bowler Foundry Co., The  
Cleveland Chaplet & Mfg. Co.  
Cleveland Steel Cement Co.  
Cleveland Tumbling Barrel & Mfg. Co.  
Federal Foundry Supply Co., The  
Interstate Tumbling Barrel Mfg. Co.  
Mills, H. E., Mfg. Co., The  
Ohio Forge Co., The  
Osborn Mfg. Co., The  
Smith, J. D. Foundry Supply Co., The

### FRUIT JUICE

Cleveland Fruit Juice Co.  
Zipp Mfg. Co., The

### FURNACE LAMPS

Taylor & Boggis Foundry Co., The

### FURNITURE

Bonhard Art Furniture Co., The  
Brooks Household Art Co., The  
Buschman, W. & Co.  
Cleveland Desk Co.  
Cleveland Store Fixture Co.  
Forsberg, Chas.  
Janssen & Loeblein.  
Kundtz Theodor  
Kurtz Furniture & Mfg. Co.  
Marble Chair Co., The B. L.  
Marble & Shattuck Chair Co.  
Otis-Moore Co., The  
Owen, D. T. Co.  
Rohrheimer Studios, The  
Royal Furniture Co.  
Scheier, D. L., Furniture Co., The  
Schwegler & Co.  
Van Dorn Iron Works Co., The

### FURNITURE POLISH

Surprise Polish Co., The

### FURS

Banke, F.  
Benedict & Mueller.  
Engel, Wm. F.  
Gammel, R. W. Co., The  
Halle Bros. Co., The  
Hausman, Albert  
Jackman's Wm., Sons  
Juras, Andre

### GALVANIZING

Cleveland Galvanizing Works Co., The  
Globe Machine & Stamping Co., The

### GAS FURNACES

Schill-Rehberg Co., The

### GAS PRODUCERS

Wellman-Seaver-Morgan Co., The

### GAS RANGES

American Stove Co., The  
Champion Steel Range Co., The  
Dangler Stove Co.  
Economy Stove Co.  
Schneider & Trenkamp Co.  
Standard Lighting Co.

### GAS REGULATORS

Natural Gas Regulator Co.

### GAS TUBING

Ohio Rubber Co., The

### GAS WATER HEATERS

Natural Gas Regulator Co.

### GAS AND ELECTRIC FIXTURES

Central Gas & Electric Fixture Mfg. Co.  
Gas Fixture & Brass Co.  
General Incandescent Lamp Co.  
Morreau Gas Fixture Co., The  
Natural Gas Regulator Co.  
Northern Ohio Gas Appliance Co.  
Ohio Gas & Electric Fixture Mfg. Co.

### GAS AND GASOLINE ENGINES

Bruce-Meriam-Abbott Co., The  
Derain Motor Co.  
Loew Mfg. Co., The

### GASOLINE AUTOMOBILES

Gaeth Auto Co., The  
Peerless Motor Car Co., The  
Royal Motor Car Co., The  
Stearns & Co., The F. B.  
Winton Motor Carriage Co., The

### GEARS

Bultman, F. H. Co., The  
Horsburgh & Scott Co., The  
Sawyer Gear Works.  
Van Dorn & Dutton Co., The

### GENERATORS

Lincoln Electric Co., The  
Lincoln Motor Works Co., The

### GLASS

American Mirror Beveling & Art Glass Co.  
Cleveland Window Glass & Door Co., The  
Crane Glass & Mfg. Co.  
Diamond Glass Co., The  
Korfhage, J. H.  
Lewis, H. W.  
Solar Prism Co.  
Ursem Bros. Art Glass Co.  
Whipple Art Glass Co.  
Woodman, G. F.

### GLASS NOVELTIES

Art China & Glass Co.

### GLUE

Masek, Charles

### GOLD LEAF

Konst, Paul P.

### GRANITO

Cleveland Mosaic & Marble Co.

### GRILLS AND WICKETS

Cleveland Art Metal Co.  
Cleveland Grill Mfg. Co.  
Tyler, W. S. Co., The

### GROCERS' SUNDRIES

Edwards, Wm. Co., The  
Haserot Co., The

### GROUND ANCHORS

Atlas Anchor Co., The

### GROUND CLAMPS

Blackburn Specialty Co.

### HAND CARS

Kirk-Latty Mfg. Co., The

### HANDLE BARS

Kelly Handle Bar Co., The

### HANGERS—GARMENT

Beattie Stamping Co., The

### HANGERS—JOIST AND WALL

Duplex Hanger Co.  
Van Dorn Iron Works Co., The

### HARDWARE

Bronson-Walton Co., The  
Buckeye Saw-Vice Co.  
Cleveland Car Specialty Co.  
Cleveland Hardware Co., The  
Cleveland Lock Co.  
Cleveland Twist Drill Co., The  
Clough-Baird Mfg. Co.  
Eberhard Mfg. Co., The  
Fanner Mfg. Co., The  
Globe Machine & Stamping Co.  
Hohlfelder, F. Co., The  
Kelly Handle Bar Co., The  
Konigslow, Otto, Mfg. Co., The  
Kredo, A., Carriage Hardware Co.  
Lake Erie Nail & Supply Co., The  
Langenau Mfg. Co.  
Loew Mfg. Co., The  
National Mfg. Co., The  
O'Donnell Co., The  
Ohio Forge Co.  
Osborn Mfg. Co., The  
Peck, Stow & Wilcox Co.  
Standard Foundry & Mfg. Co.  
Taylor & Boggis Foundry Co., The  
Upton Nut Co., The  
Walworth Run Foundry Co.

### HARNESS AND SADDLES

Bondy, Louis, Harness Co.  
Cleveland Harness Mfg. Co.  
Eberhard Mfg. Co.  
Knowles, Calvin  
Mott, J. F.

### HATS AND CAPS

Burns & Bleeze Co.  
Comey & Johnson Co., The  
Davis Co., The W. B.  
Kacser, M.

Levi, Edward & Co.  
Mahrer, Fishel & Engelhard.  
Mendelson, Theodore  
Offenhauser, A. R.  
Ohio Hat Co.  
Oppen Cap Co.  
Sebastian, J.  
Shrier, Joseph  
Stecker, Wiener & Co.  
Zweig Bros.

### HEAT REGULATORS

Price Electric Co., The

### HEATING AND VENTILATING

Ohio Blower Co., The

### HOISTING AND CONVEYING MACHINERY

Bartlett & Snow Co., The C. O.  
Brown Hoisting Machinery Co., The  
Browning Engineering Co., The  
Chase Machine Co., The  
Cleveland Elevator Bucket Co., The  
Dunn, J. P.  
Hill Clutch Co., The  
King Bridge Co.  
McMyler Mfg. Co., The  
Otis Elevator Co.  
Wellman-Seaver-Morgan Co., The  
Williams, G. H. Co., The

### HOSE

Mechanical Rubber Co., The

### ICE—ARTIFICIAL

City Ice Delivery Co., The  
Colonial Ice Co.  
Columbia Ice Co., The  
Gerlach, R. P.  
Independent Ice Co.  
Manufactured Ice Delivery Co., The  
Pictet Ice Works, The  
Sheriff St. Market & Storage Co., The

### ICE CREAM

Baum, Leopold  
Birch Ice Cream Co., The  
Cloverdale Dairy Co., The  
Denly Co., The  
Euclid Ice Cream Co., The  
Hoffman Dairy Products Co.  
Hoffman & Mooney.  
Jersey Ice Cream Co.  
Jewell, M. F.  
Kinsman Ice Cream Co.  
Kinzer Hoky-Poky Co.  
Noville, William  
Stern, Jos. B.  
Telling Bros. Co., The  
Telling-Ott Dairy Co.

### ICE MACHINES

Cleveland Ice Machine Co., The

## ILLUMINATING COMPANIES

Cleveland Electric Illuminating Co., The  
Cleveland Gas Light & Coke Co.  
Cleveland Light & Power Co.  
Cuyahoga Light Co., The  
People's Gas Light Co.

## INCUBATORS

Root Incubator Co.

## INDUSTRIAL CARS

Ohio Ceramic Engineering Co., The

## INSECT POWDER

Boyle, George A. & Co.

## INSULATING VARNISH

Glidden Varnish Co., The

## INTERIOR DECORATING

Brooks Household Art Co., The  
Bowman & Dodd Co.  
Cooks Bros.  
Rohrheimer Studios, The  
Weber, Lind & Hall Co.

## IRON AND STEEL

Acme Foundry Co., The  
American Steel & Wire Co.  
Anchor Fence & Mfg. Co., The  
Brooks, T. H. & Co.  
Buckeye Fixture Co., The  
Central Wire, Iron & Fence Works, The  
Chisholm & Moore Mfg. Co., The  
Cleveland City Forge & Iron Co., The  
Cleveland Furnace Co., The  
Cleveland Steel Casting Co.  
Cleveland Steel Co.  
Clifford Iron Works.  
Crucible Steel Company of America.  
Crucible Steel Forge Co.  
Fanner Mfg. Co.  
Forest City Steel & Iron Co., The  
Garry Iron & Steel Co.  
Globe Machine & Stamping Co., The  
Grant Automatic Machine Co., The  
Grant-Lees Machine Co., The  
Houghton & Richards.  
Hydraulic Pressed Steel Co., The  
Johnston & Jennings Co., The  
Kilby Mfg. Co.  
King Bridge Co.  
Kirchner's Iron Wire & Bronze Works.  
Lake Erie Iron Co.  
Lake Erie Nail & Supply Co., The  
Macbeth Iron Co.  
National Iron & Wire Co., The  
National Malleable Castings Co., The  
O'Donnell Co., The  
Otis Steel Co., The, Ltd.,  
Republic Structural Iron Works Co.

Robinson Mfg. Co.

Rose Bros.

Sheer Bros. Fence & Iron Co., The  
Sheer, Geo. D., Iron Works, The  
Smith, J. D., Foundry Supply Co., The  
Superior Foundry.  
Tyler, W. S., Co., The  
Union Rolling Mills Co., The  
Van Dorn Iron Works Co.,  
Variety Iron & Steel Works Co.  
Walker, Wm. J. & Co.  
Weber Iron & Fence Works.  
Wellman-Seaver-Morgan Co., The  
West Steel & Iron Casting Co.  
Zeman Iron Works, Co., The

## JAPANNING

Jeavons, A. N.  
Mannen & Esterly Co., The  
Ohio Varnish Co., The  
Taylor & Boggis Foundry Co., The

## JEWELRY

Ball, Webb C. Watch Co., The  
Bowler & Burdick Co.  
Brunner Bros. Co., The  
Cowell & Hubbard Co.  
Gillespie, William  
Gooel & Widemann Co.  
Hirschman, L. W.  
Juengling, J. W.  
Mathea & Stotter.  
Ramp & Bock.  
Scribner & Loehr Co., The  
Strang, F. D.

## JUVENILE AUTOMOBILES AND WAGONS

Kirk-Latty Mfg. Co., The

## KNIT GOODS

Bamberger-Neuman Co., The  
Blepp, Martin A.  
Cleveland Knitting Mills, The  
Eibel, Richard  
Federal Knitting Mills.  
Friedman, Blau, Farber Co., The  
Keetch, Wm. I., Knitting Co., The  
Mandel, A. J. & Co.  
Mentor Knitting Mills Co.  
Mitchell, Frederick  
Rich, N. J. & Co.  
Scharfeld-Drake Hosiery Co.  
Shlesinger, S. Knitting Co.  
Standard Knitting Co., The  
United Knit Goods Co.

## KNITTED COATS, SWEATERS, SHAWLS

Keetch Knitting Co., The Wm. I.  
Standard Knitting Co., The

## LABELS

Whitworth Bros. Co., The

### LADDERS

Cleveland Ladder & Scaffold Co.

### LAMPS

Adams-Bagnall Electric Co., The  
Brilliant Electric Co., The  
Buckeye Electric Co.  
General Incandescent Lamp Co.  
Independent Incandescent Lamp Co.  
Laganke, Robert F.  
National Electric Lamp Co.  
Rose Bros.

### LANTERN SLIDES

Edmondson Co., The  
Patton Mfg. Co., The H. F.

### LAUNDRY MACHINES AND SUPPLIES

Cleveland Laundry Machinery Co.  
Cleveland Mfg. Co., The  
Mannen & Esterly Co., The  
Troy Laundry Machinery Co.

### LAWN WEEDERS

Cleveland Lawn Weeder Co.

### LEAD BURNING

Hahn, William

### LEAD PIPE

Gibson & Price Co.  
Hahn, William

### LEATHER BELTING

Martin Rawhide Belting Co., The  
Republic Belting Co., The  
Sawyer Belting Co.  
Sero Specialty Co.

### LEATHER DYES

Cummer Co., The James W.

### LEATHER AND FINDINGS

Cleveland Belting & Machinery Co.  
Cleveland Fillet Co.  
Cleveland Leather Goods Co.  
Cleveland Tanning Co., The  
Fetzer & Spies.  
Kroehle's Sons Co., The Adam  
Muehlhausen, A. & Son  
Pierce & Co., S. L.  
Republic Belting Co., The

### LEATHER PRESERVATIVE

Solife Mfg. Co., The

### LIFTING MAGNETS

Lincoln Electric Co., The

### LIGHTNING RODS

Cleveland Galvanizing Works Co., The

### LITHOGRAPHERS

Central Lithograph Co.  
Cleveland Lithograph Co.

Enterprise Printing Co.  
Morgan Lithograph Co., The  
Otis Lithograph Co., The  
Ryan, J. D. Co., The  
Schmitz-Horning Co., The  
Zarsky, E.

### LOCK AND GUNSMITHS

Berry, S. F.  
Forest City Key Works.  
Kuzel & Jenc Co.  
Lehr, Frederick  
Sackman, F. A.  
Zluhan, Frederick

### LOCKS

Beeman Lock Co.  
National Safe & Lock Co., The  
O'Donnell Safety System Co., The

### LUBRICANTS

Climax Refining Co., The  
Standard Oil Co., The

### LUMBER

Martin-Barriss Co., The  
Nicola, Stone & Myers Co., The

### MACARONI AND NOODLES

Catalano, Cosimo  
Cleveland Macaroni Co., The  
Columbiana Macaroni Co.  
Gaetano, Gerace  
Italian-American Macaroni Co.  
Pfaffman Egg Noodle Co., The  
Purpura & Co.

### MACHINE KNIVES

Cleveland Machine Knife Co.  
White Tool & Supply Co., The  
Worden Tool Co., The

### MACHINE TOOLS

Lucas Machine Tool Co.  
Warner & Swasey Co., The

### MACHINERY

Acme Machinery Co., The  
Adjustable Collet Co., The  
Ajax Mfg. Co., The  
Allen Machine Co.  
American Ball-Bearing Co., The  
American Machine & Mfg. Co., The  
American Shipbuilding Co., The  
Automatic Stamping Machine Co., The  
Bardons & Oliver.  
Bartlett, C. O. & Snow Co.  
Benson, A. M. Co., The  
Berkshire Mfg. Co., The  
Bissett, R. J. & Co.  
Bomgardner Mfg. Co., The  
Braze-Weld Co., The  
Brown Hoisting Machinery Co.  
Browning Engineering Co., The

**MACHINERY—Continued.**

Buckeye Brazing Co.  
Buckeye Chemical Engine Co.  
Bullock, T. H. Mfg. Co.  
Bultman, F. H. Co., The  
Burbank, Sumner J.  
Burton & Johnson.  
Cady Machine Co., The  
Carter, W. D.  
Champion Machine & Forging Co.  
Chandler & Price Co., The  
Chase Machine Co., The  
Chisholm Steel Shovel Works.  
City Machine Co.  
Cleveland Automatic Machine Co., The  
Cleveland Belting & Machinery Co.  
Cleveland Die & Mfg. Co.  
Cleveland Fence Machine & Wire Co.  
Cleveland Ice Machine Co., The  
Cleveland Laundry Machine Co.  
Cleveland Machine & Mfg. Co.  
Cleveland Meat Chopper Co.  
Cleveland Numbering Machine & Engraving Co.  
Cleveland Mfg. Co.  
Cleveland Mfg. & Supply Co.  
Cleveland Planer Works Co., The  
Cleveland Punch & Shear Works Co., The  
Cleveland Tool & Supply Co., The  
Clough & Witt Machine Co.  
Cobb, W. B.  
Columbia Metal Stamping Co.  
Commercial Mfg. Co.  
Crawford Mfg. Co.  
Cummer, F. D. & Son Co.  
Cuyahoga Boiler Works.  
Cuyahoga Mfg. Co.  
Davis Clutch Co., The  
DeMooy Bros.  
Diebold-Peters Co., The  
Durst & Lambert.  
Eureka Machine Co.  
Evers Iron Works.  
Excelsior Hoisting Machinery Co.  
Ferro Machine & Foundry Co., The  
Foos Gas Engine Co.  
Fraser, Wm. D.  
Gas Machinery Co., The  
Geier, P. A., Co., The  
Gerlach, Peter Co., The  
Gisholt Machine Co.  
Globe Machine & Stamping Co., The  
Grant Automatic Machine Co., The  
Grant-Lees Machine Co., The  
Gregg Mfg. Co.  
Hartz, H. V., & Co.  
Hill Clutch Co., The  
Homer Commutator Co., The  
Horsburgh & Scott Co., The  
Hunt & Dorman Mfg. Co., The  
Hydraulic Pressed Steel Co.  
Ideal Tool & Specialty Works.  
Industrial Machine Works.  
Jackson, C. E. & Co.  
Johnston & Jennings Co., The  
Karr & Lange.  
Kilby Mfg. Co., The  
Knight, J. C. & Son, Machine Co.  
Kohn, J. W. & Co.  
Konigslow, E., Stamping & Tool Works.  
Konigslow, Otto, Mfg. Co.  
Lake Erie Nail & Supply Co., The  
Leonard-Bundy Electric Co.  
Loew Mfg. Co., The  
Long-Arm System Co.  
Lord, Bowler & Co.  
M. & G. Machine Co.  
McKelvey Machinery Co.  
McMyler Mfg. Co.  
Macbeth Iron Co.  
Manning, Maxwell & Moore.  
Mather & Waechter.  
Motch & Merryweather Machinery Co.  
National Acme Mfg. Co., The  
National Machinery and Wrecking Co., The  
National Rope Computing Machine Co., The  
O'Donnell Safety System Co., The  
Ohio Bates Valve Bag Co.  
Ohio Ceramic Engineering Co., The  
Ohio Machine & Boiler Co., The  
Oram, John S.  
Ord, C. E.  
Otis Elevator Co.  
Pettifer, Thomas & Co.  
Phoenix Machine Co., The  
Republic Belting Co., The  
Ruefly Bros.  
Sabin Machine Co.  
Sawyer Gear Works.  
Simplex Mfg. Co.  
Sly, W. W., Mfg. Co., The  
Smith, J. D., Foundry Supply Co., The  
Spotless Steam Sponger Co.  
Standard Machine Co.  
Standard Sand & Machine Co.  
Standard Vacuum Co.  
Stovering & Pfarr Machine Co.  
Strong, Carlisle & Hammond Co., The  
Union Engineering Co., The  
Universal Drafting Machine Co.  
Van Dorn & Dutton Co., The  
Variety Iron & Steel Works Co.  
Vincent Mfg. Co., The  
Waldeck, A.  
Ward Machine Co.  
Warner & Swasey Co., The  
Wellman-Seaver-Morgan Co., The  
Westinghouse Machine Co.  
Westman, LeRoy A.  
Whitmore Mfg. Co.  
Williams, R. A. & Co.

**MALLEABLE CASTINGS**

National Malleable Castings Co., The

**MANTELS—GAS AND INCANDESCENT**

Manufacturers' Supply Co.  
Thomas, A. D.

**MAPS AND FIXTURES**

Forman-Bassett-Hatch Co., The  
Howe, William A., & Co.  
Whitworth Bros. Co., The

**MARBLE AND GRANITE WORKS**

Binz, Philip  
Carabelli, Joseph  
Cleveland Mosaic & Marble Co.  
Empire Marble Co.  
Forest City Marble & Mosaic Co., The  
Norcross Co., The  
Rolf, Wm.  
Talamini, E. & Co.  
Vermont Marble Co.

**MARINE ENGINES**

Loew Mfg. Co., The

**MARINE MOTORS**

Mark Motor Co.

**MARINE PAINTS**

Glidden Varnish Co., The

**MATTRESSES**

Cleveland Mattress Co., The  
East End Bedding Co.  
Ohio Mattress Co., The  
Ohio Spring Bed Co., The  
Randall Mattress Co., The

**MEDICINES**

Epstein Malt Co., The  
Lexoid Co., The  
Musterole Co., The  
Norris, G. G. Sons  
Spina Drug & Chemical Co.  
Springsteen Medicine Co.  
Williams Manufacturing Co.

**MEN'S FURNISHINGS**

Cleveland Neckwear Co., The  
Davis, Co., The W. B.  
Economy Collar & Cuff Co.  
Forest City Suspender Co.  
Glick, Jacob  
Klein, Lichtenstader & Co.  
Metzenbaum, Joseph  
Wilbur, Campbell & Stephens Co.

**METAL POLISH**

Chemical Supply Co.  
Stilboma Mfg. Co.

**METAL REFINING**

Lake Erie Smelting & Refining Co.  
Pegg, James W.

**METAL SPECIALTIES**

Cleveland Galvanizing Works Co., The  
Cleveland Wire Spring Co., The  
Globe Machine & Stamping Co., The  
H. & H. Art Metal & Mfg. Co.  
Parish & Bingham Co., The  
Riester & Thesmacher Co., The

**METAL SPINNING**

Abbott, Samuel

**METALLURGICAL FURNACES**

Wellman-Seaver-Morgan Co., The

**METERS**

Cleveland Gas Meter Co.  
Ohio Gas Meter Co., The

**MILL SUPPLIES**

Ohio Rubber Co., The

**MILLINERY SUPPLIES**

Comey & Johnson Co., The  
Field, A. H.  
Hart, William F. & Co., The  
Hart & Co.  
Hurdley & Co.  
Reed Bros. Co.  
Rice I. & Son.  
Waddell Co., The

**MIRRORS**

Ehlert, Henry F.  
Cleveland Window Glass & Door Co., The

**MOLDING MACHINES**

Taylor & Boggis Foundry Co., The

**MOTORS**

Lincoln Electric Co., The  
Lincoln Motor Works Co., The

**MULTIGRAPHS**

American Multigraph Co., The

**MUSIC PUBLISHERS**

Currier Music Co.  
Fox, Sam, Publishing Co.  
McMillan, H. E.  
Schmehl Printing Co.  
Schubert Music Co.  
White, H. N.

**MUSICAL INSTRUMENTS**

Meckel Bros. Co., The  
Raymond, F. L., Co.  
Votteler, Hettche Organ Co., The  
White, H. N.

**NAILS**

American Steel & Wire Co.

**NATURAL GAS FURNACES**

Mannen & Esterly Co., The

## NECKWEAR

Cleveland Neckwear Co., The

## NOTIONS AND NOVELTIES

Dancyger Safety Pin Ticket Co.

Farres, Salim & Co.

Gorham Mfg. Co., The

Halle, Schwarz & Skall.

Kohn & Steiner.

Lavigne, R. O.

Nussbaum, Gillner & Grossman.

Shapiro, I.

Stearn & Co.

Wertheimer, Haas & Co.

## OFFICE FURNITURE

Cleveland Desk Co.

Marble Chair Co., The B. L.

Marble & Shattuck Chair Co., The

Van Dorn Iron Works Co., The

## OIL AND GREASE

Acme Grease & Oil Mfg. Co.

Brooks Oil Co.

Canfield Oil Co.

Cardinal Mfg. Co.

Climax Refining Co., The

Columbia Refining Co.

Cozzens, M. A., Lard Oil Co.

Cummer, James W., Co.

Dieterichs Valve-Oleum Co.

Empire Oil Co.

Energine Refining Co., The

Ensign Refining Co.

Franklin Oil & Gas Co.

Globe Oil Co., The

Great Western Oil Co., The

Hascall Paint Co., The

Hascall-Wise Co.

Kingsley Paint Dryer Co.

Lake Carriers Oil Co.

Malone Oil Co.

Mohawk Refining Co., The

National Refining Co.

Navarre Oil Co.

Phoenix Oil Co., The

Pioneer Mfg. Co.

Plomo Specialty Mfg. Co., The

Sero Specialty Co.

Standard Linseed Co.

Standard Oil Co., The

Star Lubricating Oil Co., The

Stevens Grease & Oil Co.

United States Oil Co., The

United States Linseed Oil Co.

United States Provision Co.

Van Berken Grease & Oil Co.

## OIL STOVES

Cleveland Foundry Co., The

Dangler Stove Co.

Taylor & Boggis Foundry Co., The

## OLEOMARGARINE

Peerless Butter Co.

## OPTICIANS

Alexander Optical Co.

Brown, Ernest B.

Cleveland Optical Co.

Cowell & Hubbard.

Davis, E. N.

Dister, R. A.

Fishel, C. B.

Hoeret, P. A.

Johnston, J. F. & Mrs. J. P.

Jones, W. A., Optical Co., The

King, Julius, Optical Co., The

Kluger Optical Co.

Knittle & Longtin.

Robinson, Miss A. D.

Rogers-Thomas-Dodd Optical Co., The

Solomonson Optical Co.

Squier, George A.

Williams, H. D.

## ORNAMENTAL IRON

Anchor Fence & Mfg. Co., The

O'Donnell Co., The

Rose Bros.

Sheer Bros. Fence & Iron Co., The

Sheer, George D., Iron Works, The

Tyler, W. S., Co., The

Van Dorn Iron Works Co., The

## OVERALLS

Euclid Mfg. Co.

Greenwald, Joseph H., Co.

Klein, Samuel & Bros.

Levy, Jacob H.

Opecht, Louis

Witkowsky's Sons, A.

## PAINTS AND VARNISHES

Acker Lead & Color Co.

Atlantic Paint Co., The

Billings-Chapin Co., The

Cleveland Varnish Co.

Cleveland Window Glass & Door Co., The

Climax Refining Co., The

Colonial Paint Co.

Empire Varnish Co.

Excelsior Varnish Co.

Forest City Paint & Varnish Co., The

Glidden Varnish Co., The

Hascall Paint Co., The

Hughes, A. F.

Kingsley Paint Dryer Co.

Kregelius L. M.

Lino Paint Co.

McNairy, A. B., & Co.

Monarch Paint Co., The

Moore, Benjamin, & Co.

National Lead Co., The



**PAINTS AND VARNISHES—Continued.**

National Paint & Varnish Co.  
Ohio Varnish Co., The  
Pioneer Mfg. Co., The  
Patterson-Saigent Co.  
Reliable Oil & Paint Co., The  
Sherwin-Williams Co., The  
Standard Paint Co.  
Star Varnish Co., The  
Superior Varnish & Chemical Co.  
Vaughan Paint Co., The  
Venderink, B. T. & Co., The  
Warren Paint Co., The  
Western Reserve Varnish Co.

**PANTS**

Art Craft Pant Co.  
Euclid Pants Co.  
Greenwald, Joseph H.  
Levy, J. H.  
Marks, Jacob  
Obert & Jecker.  
Witkowsky's Sons, A.  
Wolpaw, J., & Bros.

**PAPER**

Cleveland-Akron Bag Co., The  
Cleveland Paper Mfg. Co., The

**PAPER BOXES**

Cleveland Paper Box Co., The  
Grossman Paper Box Co., The  
Hahn Co., The J. N.  
Ideal Paper Box Co.  
Ohio Boxboard Co., The  
Peerless Paper Box Mfg. Co., The

**PASTE**

Cleveland Paste Co., The  
Ohio Steam Paste Co.

**PATTERN LETTERS**

Cleveland Fillet Co., The  
Cleveland Galvanizing Works Co., The

**PATTERNS AND MODELS**

Balkwill Pattern Co.  
Carr, David  
Cleveland Castings Pattern Co.  
Cleveland Fillet Co., The  
Cleveland Galvanizing Works Co., The  
Cleveland Metal Pattern Co.  
Cleveland Pattern Works.  
East End Pattern Works.  
Globe Machine & Stamping Co.  
Gobeille Pattern Co., The  
Goerss, Herman C., Jr.  
Moll, William  
Ohio Pattern & Model Co., The  
Palmers & DeMooy Foundry Co., The  
Remech, John

Russell, Samuel  
Scherer, William, Mfg. Co.  
Schraner, A. P.  
Shaw, Geo. E., & Son.  
Standard Pattern Works, The  
Superior Pattern Works.  
Taylor & Boggis Foundry Co., The  
U. S. Pattern Works.

**PAVING MATERIALS**

Barrett Mfg. Co.

**PEANUT BUTTER**

New England Specialty Co.  
Royal Peanut Butter Co.

**PERFUMERY**

Klinker Mfg. Co.  
Knapp Extract Co.  
Royce, Abner Co., The

**PETROLATUM**

Wallace, William H.

**PHONOGRAPH RECORDS**

Cleveland Phonograph Record Co., The

**PHOTOGRAPHERS**

Adkins, Albert  
Bakody & Berger.  
Balazs, Adolph  
Bill, Frank R.  
Bowersox, A. L.  
Boyd, Samuel  
Buckeye Stereopticon Co.  
Burk, A. D.  
Caxton Co., The  
Chestnutt Bros.  
Cleveland Commercial Photo Co.  
Cleveland Electric Light Enlarging Co.  
Cline, Eugene, & Co.  
Corday & Gross Co., The  
Edmondson Co., The  
Edmondson, Geo. M.  
Elton Studio, The  
Euclid Studio, The  
Gabel, Jesse J.  
Gilmore, S. L.  
Goldman, Albert  
Heinz, H. F.  
Horton, Chas. W.  
Hunger, C. F., & Co.  
Krumhar, R. F.  
Krumhar, R. H.  
L. S. & B. Illustrating Co.  
Marquard, B. A.  
Moore, Frank  
Moore & Brackett.  
Newman Studio, The  
Ritchie, Samuel J.  
Rychalski, Stanislaus  
Scharp, E.

**PHOTOGRAPHERS—Continued.**

Stoll, Frank R.  
Stone, A. A.  
Storeck, Jay F.  
Valentine, F. C.  
Webb, T. E.  
Werner & Sanborn.  
Young, Geo. B.

**PIANO PLATES**

Superior Foundry Co., The

**PIANOS AND ORGANS**

Meckel Bros. Co., The  
Raymond, F. L. Co., The  
Votteler-Hettche Organ Co., The

**PICTURE FRAMES AND MOULDINGS**

Bonfoey, A. D.  
Gebbs Moulding & Mfg. Co.  
Mayer, George  
Ohio Moulding Mfg. Co., The  
Schaber, John  
Zimmerman, F. Co., The

**PILLOWS**

Cleveland Feather Co., The

**PLANERS**

Cleveland Planer Works Co., The  
Cleveland Punch & Shear Works Co., The

**PLATERS**

American Plating Works.  
Auto Plating & Mfg. Co.  
Baird, A. J.  
Buckeye Fixture Co., The  
Central Plating Works.  
Forest City Plating Co.  
Globe Machine & Stamping Co., The  
Northern Ohio Mfg. & Refinishing Works.  
Northern Ohio Plating Works.  
Taylor & Boggis Foundry Co., The  
Valley Plating Works.

**PLEATING**

Cleveland Dress Trimming Co., The  
Kimball, George, & Co.  
Korach, Jos., & Co.  
Oettinger Specialty Co.  
Overbeke Bros.

**PLOWS**

Empire Plow Co., The

**PLUMBAGO**

Smith, J. D., Foundry Supply Co., The

**PLUMBERS' AND STEAM FITTERS'  
SUPPLIES**

Acme Brass Works.  
Atlas Brass Mfg. Co.

Bause, A. J.  
Bishop & Babcock Co.  
Central Brass Mfg. Co.  
Chafer Co., The  
Cleveland Bronze & Brass Works.  
Cleveland Steam Fitting & Supply Co., The  
Cleveland Steam Gauge Co., The  
Cudell, F. E.  
Cuyahoga Plumbing Supply Co., The  
Daykin Bros.  
Elgin Brass Co.  
Empire Brass Mfg. Co.  
Farnan Brass Works.  
Glauber Brass Mfg. Co.  
Globe Brass Mfg. Co., The  
Grabler Mfg. Co.  
Monarch Brass Co., The  
National Mfg. Co., The  
Régar Co., The  
Reliance Gauge Column Co., The  
Royal Brass Mfg. Co., The  
Sanitary Co., The  
Squires, C. E. Co., The  
Whitlam, J. C., Mfg. Co.

**POLISHES**

Baird Bros., & Co.  
Chemical Supply Co.  
Cummer, J. W. Co., The  
North American Polish Co.  
Scott, Leslie T.  
Solife Mfg. Co.  
U. S. Chemical Co.  
Woodberry A. J.

**POP CORN**

Humphrey Co., The  
New England Pop Corn & Candy Co.

**PORK PACKERS**

Cleveland Provision Co., The

**PORTABLE HOUSES**

Rutherford, Geo. A., Co., The

**POSTERS**

Otis Lithograph Co., The

**POULTRY SUPPLIES**

Besaw Chemical Co., The  
Conkey Co., G. E.

**POWDER**

Austin Powder Co.

**PRESSED STEEL PARTS**

Columbia Metal Stamping Co.  
Globe Machine & Stamping Co., The  
Hydraulic Pressed Steel Co., The

**PRINTERS**

Acme Printing Co.  
American Printing Co.

PRINTERS—Continued.

American Publishing Co., The  
Bailey's Printery.  
Barker, S., & Sons.  
Britton Printing Co., The  
Broadway Printing Co.  
Brooks Co., The  
Browning Press.  
Bruner Printing Co., The G. W.  
Bryan, Edwin E.  
Calvert & Hatch.  
Carr, Horace  
Caxton Co., The  
Caxton Printing Co.  
Clemens, H. N.  
Colonial Printing Co., The  
Columbia Printing Co., The  
Commercial Printing & Pub. Co.  
Corday & Gross Co., The  
Cuyahoga Printing Co.  
Davies Printing Co.  
Davis & Cannon.  
Egensperger Printing Co.  
Eisele Printing Co., The  
Electric Printing Co., The  
Enterprise Printing & Litho. Co.  
Euclid Printing Co.  
Exline Co., The  
Fairbanks, W. C.  
Foote, Tom  
Forman-Bassett-Hatch Co., The  
Foss, F. W., & Co.  
Gardner Printing Co., The  
Gilman Printing Co., A. S.  
Graham Printing Co.  
Haber, Max  
Harris, J. H., & Co.  
Hiles & Coggsall.  
Hobey, Max  
Holmes, Chas. H.  
Hubbell Printing Co., The O. S.  
Ideal Printing Co.  
International Printing Co.  
Johnson, Jacob E.  
Jontzen Printing Co.  
Judson Printing Co., The  
Kaber, M., & Son.  
Ketteringham, W. B.  
Klein Printing Co., The  
Kneale, Wm. E.  
L. S. & B. Illustrating Co.  
LaFramboise Printing Co.  
Lake View Printing Co.  
Lamb, Judson H.  
Lezins Chas., Printing Co.  
Lutz, Charles P. E.  
McCabe, M. E.  
McFarland, Leslie S.  
Martin Printing Co.  
Miller Printing Co.

Monck, S. Joseph  
Morgan, J. H., & Co.  
Morgan Printing Co.  
Moses & Co.  
Mount & Co.  
Murphy, Michael F.  
National Ticket Co., The  
Nelson Bros.  
Nitschke, Charles  
Novak, Edward G.  
Novelty Card Co.  
Office Supply & Printing Co., The  
Ohio Legal Blank Co.  
Ohio Printing Co., The  
Pankuch, John  
Polonia, W. Ameryce  
Pihoda, B. F.  
Printing Press, The  
Rapid Printing Co.  
Reeves, C. R., Printing Co.  
Richards & Bull.  
Rife & Barr.  
Roberts, F. W., Co., The  
Robertson, Wm. A.  
Rocker Printing Co.  
Rogers, A. C., Co., The  
Rozko, Joseph, Printing Co.  
Saeger, G. E., Printing Co., The  
Savage, J. B., Co., The  
Schmehl Printing Co., The  
Schmidt, R.  
Sitter, Wm.  
Sloss-Machol Co.  
Smellie, W. R., Printing Co.  
Snyder, George J.  
Standard Printing Co.  
Stearns Printing Co.  
Straus, J. & F., Co.  
Street Railway Employes Printing Co.  
Times Printing & Publishing Co.  
Trade Engraving Co.  
United States Printing Co.  
Ward & Shaw.  
Warren, Edward  
Watt, A. J.  
West Side Printing House.  
Whitworth Bros. Co., The  
Willcutt, Frank L.  
Wilson Printing & Publishing Co., The

PRINTERS' SUPPLIES

Bingham & Runge.  
Carter Printing Ink Co.  
Chandler & Price.  
Cleveland Paper Mfg. Co.  
Cleveland Steam Paste Co.  
Dexter Folder Co.  
Johnson, Chas. Eneu, & Co.  
Kingsley Paper Co.  
National Lead Co., C. C. Foerstner, Mgr.  
Ullman-Philpott Co., The

### PRINTING PRESSES

Chandler & Price Co., The

### PROPRIETARY MEDICINES

Acker Mfg. Co.  
Alpine Pharnacal Co.  
Bar-Ben Laboratory Co.  
Charmene Chemical Co.  
Cleveland Kolatona Co.  
Cinarsium Co., The  
Electine Food Remedy Co.  
Ernst, M.  
Fair, Dr., W. C., Veterinary Remedy Co.  
Feil, S. R. Co., The  
Flood, Wm. H., Co.  
Fosforat Co., The  
Hanna, Wm., Rheumatic Co.  
Hendess Medical Co.  
Keith, C. H.  
Lawrence-Williams Co.  
Lutz, C., Dr.  
Norris, G. G., Sons  
Pompeian Mfg. Co., The  
Sanar Remedy Co.  
Sano Remedy Co.  
Schuster Co., The  
Spalding, F. R., Son & Co.  
Spina Drug & Chemical Co.  
Springsteen Medicine Co.  
Viavi Co.  
White Cross Toilet & Medicine Co.  
Williams Mfg. Co.  
Witte, L. H.

### PRUNE BUTTER

Zverina & Fisher.

### PRUNE SPECIALTIES

National Importing & Mfg. Co.

### PUBLICATIONS

Acme Publishing Co.  
America, The  
American, The  
American Lawyers Co.  
American League Publishing Co.  
American Post Card & Pub. Co.  
American Publishing Co.  
American Sportsman Co., The  
Auto Era, The  
Baine, Patrick L.  
Barsuette, B.  
Barton, F. M.  
Bay State Co.  
Beacon Light.  
Biblical Encyclopedia Co.  
Bickel, Karl Phil  
Blue Book of American Shipping.  
Bowman, Frank A.  
Boyd, A. Gladwell  
Bratenahl Times, The

Brooks Co., The  
Brotherhood of Locomotive Engineers' Journal.  
Brown, J. T.  
Browning's Industrial Magazine.  
Buckee Trail, The  
Bullis & Holden.  
Burrows Bros. Co., The  
Caie, Thos. J. & Co.  
Carpenter Co., The  
Castings.  
Catholic Universe Publishing Co., The  
Central Publishing House.  
Christian Harvester, The  
Christian World.  
Citizen, The  
Citizens Printing Co.  
Clark, Arthur H., Co.  
Classified Business & Directors' Directory.  
Cleveland Blue Book, The  
Cleveland Citizen, The  
Cleveland City Directory.  
Cleveland Clipper.  
Cleveland Daily Record Commercial Bulletin  
Co.  
Cleveland Dispatch.  
Cleveland Journal, The  
Cleveland Leader Printing Co., The  
Cleveland Live Stock News.  
Cleveland Magazine.  
Cleveland Medical Journal Co.  
Cleveland News.  
Cleveland News Bureau.  
Cleveland Plain Dealer.  
Cleveland Post, The  
Cleveland Post Card Co.  
Cleveland Press, The  
Cleveland Recorder, The  
Cleveland Securities.  
Cleveland Town Topics Co.  
Cleveland Trade Bulletin Co., The  
Cleveland Tribune, The  
Cleveland Weekly Guide.  
Cleveland Young Men.  
Clevelander Volkfreund.  
Clipper Publishing Co.  
Club Notes.  
Cockett's Weeklies.  
Collinwood Chronicle.  
Collinwood Citizen, The  
Collinwood Democrat.  
Collinwood News.  
Commercial Bulletin Co., The  
Concrete Engineering Co.  
Co-Operative Publication Society.  
Cornet Band, The  
Corporations Auxiliary Co., The  
Cotton, W. H.  
Cuyahoga County Democrat.  
Cuyahoga County Ledger.  
Cuyahoga Publishing Co.  
Daily Legal News.

PUBLICATIONS—Continued.

Daily Trade Record.  
 Davis, Chas. I.  
 DeBeauclair, A.  
 Dennice, Novoveku  
 Despatch.  
 Die Neue Heimat Pub. Co.  
 Dodge, F. W., Co., The  
 Dongo.  
 Dowling, John A.  
 "Drafting."  
 Eagle Journal.  
 East Cleveland Signal.  
 Electric Railway Review.  
 Electric Traction Weekly.  
 Electrical Publishing Co., The  
 Engineers' Review Co., The  
 Evangelical Association Publishing House.  
 Evangelical Bundersbote.  
 Evangelical Friend.  
 Evangelical Herald.  
 Evangelical Messenger.  
 Evangelische Magazin.  
 Expositor & Current Anecdotes.  
 Fairchild Co.  
 Finance Publishing Co.  
 Financial Review Publishing Co.  
 Foundry, The  
 Fraternal Publishing Co.  
 Free Lance.  
 Gates Legal Publishing Co.  
 Gazette, The  
 German Baptist Publication Society.  
 German Consolidated Newspaper Co., The  
 German Press & Plate Co.  
 Gibson, David Co., The  
 Glenville Times.  
 Glick & Nichols.  
 Globe Publishing Co.  
 Goodwill Agency.  
 Gospel Herald.  
 Graham, Louise  
 Graphic Sentinel.  
 Great Lakes Register.  
 Hamilton, N. G., Publishing Co.  
 Herald Publishing House.  
 Hess, Selmar  
 Hlas, Slovak  
 Home Culture Co.  
 Hotel Life.  
 Hungarian Daily News.  
 Hungarian Gospel Trumpet.  
 Hungarian Szabadsag.  
 Hungarian's Sunday.  
 Illustrated Times and Greater Cleveland.  
 Il Progresso Italiano in America.  
 Immanuel's Witness.  
 Industrial Magazine, The  
 Inland Grocer Publishing Co., The  
 International Text Book Co.  
 Interurban Electric Railway Guide.  
 Iron Trade Review, The  
 Jednota.  
 Jewish Daily Press.  
 Jewish Independence Pub. Co., The  
 Jewish Review & Observer.  
 Johnson & Tinan.  
 Jugend Herold.  
 Justice Publishing Co.  
 Jutezenka, The  
 Kellogg, A. N., Newspaper Co.  
 Kenfield-Fairchild Publishing Co.  
 Kirchenzeitung.  
 Knickerbocker & Co.  
 Koeckert, E. C.  
 Laemmerhirte.  
 Lakewood Courier.  
 Lakewood Ledger.  
 Laning Co., The  
 Lawrence Publishing Co.  
 Leader, The Cleveland  
 Legal News, The Daily  
 Lektionsblaetter.  
 Libraria Roumania.  
 L'Italiano.  
 Little, L. G., Co.  
 McGraw Publishing Co.  
 Macaroni & Noodle Mfrs. Journal.  
 Magyar Hiromondo.  
 Magyar Napilap.  
 Marine Review Publishing Co., The  
 Matteson's Newspaper Syndicate.  
 Medical & Surgical Reporter, The  
 Melaragno, F. & O. G.  
 Men's Wear.  
 Meridian Printing Co., The  
 Moore, Thos.  
 Motor Vehicle Pub. Co.  
 Mueller, Jacob E.  
 Neue Heimat.  
 Nevins, Samuel R.  
 New Home, The  
 News, The Cleveland  
 Newspaper Enterprise Assn., The  
 Nottingham Citizen.  
 Nova-Domovina.  
 Odd Fellows' Bulletin, The  
 Ohio Architect and Builder.  
 Ohio Farmer, The  
 Ohio News Bureau, The  
 Ohio State Publishing Co.  
 Pathfinder, The  
 Penton Publishing Co., The  
 Plain Dealer Publishing Co., The  
 Polonia, W. Ameryce  
 Post Publishing Co.  
 Power Boating.  
 Power Wagon Publishing Co., The  
 Power & Poise Publishing Co.  
 Press, The Cleveland  
 Railroad Trainmen's Journal.  
 Rating & Collecting Co., The

**PUBLICATIONS—Continued.**

Recorder, The  
Romanul.  
Saemann.  
Sanborn, J. B., Co., The  
School Topics.  
Scripps-McRae Press Assn., The  
Sendbote.  
Silent Partner, The  
Slovenski Hlasnik.  
Smith, Harry C.  
Socialistische Arbeiter Zeitung.  
Soul Winner Press Co.  
South Cleveland Advocate.  
Southern Engineer.  
Swartz, J. W.  
Swetman, Edmund H.  
Sycamore Observer.  
Szabadsag Hungarian Publishing Co.  
Tarr Publishing Co.  
Technical Publishing Co.  
Times Printing & Publishing Co.  
Town Topics.  
Trade Press Bureau.  
Trainman, The  
Tribune, The  
Trident, The  
Union Reporter, The  
United Italian Pub. Co.  
Up-to-Date Distributor.  
Voce Del Popolo Italiano, La  
Volksfreund Publishing Assn.  
Waechter und Anzeiger.  
Wark, Henry & Co.  
Wattley, John B.  
Wegweiser.  
Weinberger, Maurice  
Wertheimer, Dan S.  
Wertheimer, Laon  
Westbrook, Arthur, Co.  
Whitworth Bros. Co., The  
Wielowiejski, Alexander  
Woodcraft.  
World, The  
World Evangel & The Christian

**PULLEYS**

Medart Patent Pulley Co.

**PUMPS**

Burton & Johnson.

**PUNCH PRESSES**

Bruce-Meriam-Abbott Co., The

**PUNCH AND SHEAR**

Cleveland Punch & Shear Works Co., The

**PURIFIERS**

Standard Water Purifying Co.

**PYROMETERS**

Price Electric Co., The

**RAILROAD SUPPLIES**

American Railway Signal Co., The  
Cleveland Frog & Crossing Co., The  
Electric Railway Improvement Co.  
Ferrel Brake & Mfg. Co.  
Holland, H., Trolley Supply Mfg. Co.  
Ingraham, T.  
Lintern Car Signal Co.  
Republic Belting Co., The  
Strong, Carlisle & Hammond Co., The  
Talmage Mfg. Co., The  
Westinghouse Electric Mfg. Co.

**RANGE FINDERS**

Nicholson Ship Log Co., The  
Warner & Swasey Co., The

**RAPID FIRE AND MACHINE GUNS**  
McClellan Arms & Ordnance Co., The

**REAMERS**

Cleveland Twist Drill Co., The  
Standard Tool Co., The

**REED SPECIALTIES**

Koepfner, E. D.

**REFRIGERATING MACHINERY**

Cleveland Ice Machine Co., The

**REFRIGERATORS**

Cleveland Store Fixture Co., The  
National Fixture Co.  
Probeck, P. J.  
Steiger, Wm. F.

**REGILDING**

Mayer, George

**REGISTERS**

American Watchman's Time Detector Co.  
Auer Register Co., The

**RENOVATED BUTTER**

National Butter Co.  
Ohio Creamery Co.

**RIBBONS AND CARBONS**

Buckeye Ribbon & Carbon Co., The  
Strauss, Hiram & Co.

**RIVETS**

Champion Rivet Co., The  
Kirk-Latty Mfg. Co., The  
Lamson & Sessions Co., The  
National Screw & Tack Co., The

**ROLLING MILLS and BLAST FURNACES**

American Steel & Wire Co.  
Cleveland Furnace Co.  
Cleveland Steel Co.  
Empire Rolling Mills Co.  
Otis Steel Co., Ltd., The  
Union Rolling Mill Co.

## ROLLING MILLS AND MACHINERY

Wellman-Seaver-Morgan Co., The

## ROOFING AND TINNING

Callaghan, J. & Son  
Cleveland Metal Roofing & Ceiling Co.  
Elaborated Ready Roofing Co.  
Johnson Roofing Co.  
Ohio Roofing Co., The  
Osborn Co., The J. M. & L. A.  
Riester & Thesmacher.  
Shackleton Co., The

## RUBBER COLLARS AND CUFFS

Parsons & Parsons Co.

## RUBBER GOODS

Mechanical Rubber Co., The  
Ohio Rubber Co., The  
Republic Belting Co., The

## RUBBER STAMPS

American Rubber Stamp Co., The  
Beattie & Son.  
Chandler & Fisher.  
Cleveland Rubber Stamp Co., The  
Excelsior Rubber Stamp Works.  
Fleharty, J. H. & Co.  
Hathaway Stamp Co., The  
Newman Mfg. Co.  
Taylor Bros.

## RUGS

Fuller Carpet Cleaning & Rug Mfg. Co., The  
Summers Cleaning Co., The D. O.

## RULES

Cleveland Rule Co.

## SAD IRONS

Ideal Sad Iron Mfg. Co., The

## SAFES AND LOCKS

Beeman Lock Co.  
Cleveland Lock Co.  
National Safe & Lock Co., The  
Taylor & Boggis Foundry Co.

## SAFETY BLOCKS

Burr Mfg. Co., The

## SALT

Cleveland Salt Co.  
Union Salt Co.

## SANDERS—CAR

Nichols-Lintern Co.

## SANDSTONE

Cleveland Stone Co., The

## SANITARY BRASS GOODS

Sanitary Co., The

## SASH AND DOOR

Bohm & Stuhr.  
Cleveland Window Glass & Door Co., The  
Diamond Glass Co.  
Henderson, F. L.  
Marquard Sash & Door Mfg. Co.  
Ohio Sash & Door Co., The  
Osborne & Flinkers.  
Peters' Mill Work & Lumber Co.  
Trebing Mfg. Co.  
Williams Pivot Sash Co., The  
Zeitz, William & Son.

## SASH WEIGHTS

Johnston & Jennings Co., The  
Monroe Bros. Sash Weight Co.

## SAUSAGE

Beallo, M.  
Berchtold Bros.  
Blaseg, Carl  
Brookside Sausage Co.  
Buechler, H.  
Cleveland Provision Co., The  
Decker, J. R.  
Haberman, A.  
Hildebrandt, Julius H.  
Hildebrandt Provision Co., The  
Kolda, Vincent  
Phillips, Michael  
Roth, Joseph  
Schmidt, J. S.  
Schulte, Henry  
Thran, Fred

## SAWS

Gerlach, Peter Co., The

## SCIENTIFIC INSTRUMENTS

Ulmer Co., The J. C.

## SCREWS

Atlas Bolt & Screw Co., The  
Ferry Cap & Set Screw Co., The  
Kirk-Latty Mfg. Co., The  
Monarch Bolt & Screw Co., The  
National-Acme Mfg. Co., The  
National Screw & Tack Co., The  
Upson Nut Co., The

## SEALS

Cleveland Steel Stamp Works.  
Dickey, A. H.  
Taylor Bros.

## SERUM PRODUCTS

Midy-Haneem Co., The

## SEWER TRAPS

Cudell, F. E.

## SEWING MACHINES

Standard Sewing Machine Co., The  
White Sewing Machine Co., The

### SEWING MACHINE CABINETS

Kundtz, Theodor

### SHAFTING AND PULLEYS

American Steel & Wire Co.  
Fitzsimmons & Co.  
Hill Clutch Co., The  
Medart Patent Pulley Co., The  
White Tool & Supply Co., The  
Williams, R. A. & Co.

### SHEET LEAD

Gibson & Price Co., The  
National Lead Co., The

### SHEET METAL

American Sheet & Tin Plate Co., The  
B. & D. Sheet Metal Works, The  
Callaghan, J. & Son.  
Cleveland Metal Roofing & Ceiling Co., The  
Cleveland Wire Spring Co., The  
Forest City Heating & Supply Co., The  
Fuerst, J. E. & Co.  
Grant, Jesse  
Holz, Theodore  
Hunt & Dorman Mfg. Co., The  
Mannen & Esterly Co., The  
Ortli, Charles F.  
Osborn, J. M. & L. A. Co., The  
Riester & Thesmacher Co., The  
Schwertner, B.  
Sheahan, Martin W. & Sons.  
Uhl, William  
Vincent Mfg. Co., The

### SHERARDIZING

Globe Machine & Stamping Co., The

### SHIP BUILDING

American Ship Building Co., The

### SHIP FITTINGS

Long-Arm System Co., The  
Nicholson Ship Log Co., The

### SHIP LOG

Nicholson Ship Log Co., The

### SHIPPING CASES

Ohio Boxboard Co., The

### SHIRTS, COLLARS AND WAISTS

Coles & Bonnett.  
Daniels Co., The  
Davis, W. B., Co., The  
Drake, A. F.  
Economy Collar & Cuff Co.  
Einstein, Guggenheim & Co.  
Eisenman, Chas., Co.  
Emsheimer & Fishel Co.  
Enterprise Mfg. Co.  
Euclid Mfg. Co.  
Fisher, B., & Son.  
Gross & Dallet.

Gross Co., The L. N.  
Guggenheim Co., The  
Hexter, B. & Co.  
Klein, S., & Bro.  
Metropolitan Mfg. Co.  
Parsons & Parsons.  
Schaffner Bros.  
Specht, Louis  
United Shirt & Collar Co.  
Wilbur, Campbell & Stephens Co.

### SHOE ARCHES

Aristo Arch Co.

### SHOES

Pierce, S. L. & Co.  
Schultz-Ruck-Delfs Shoe Co., The  
Skym, Matthew

### SHOVELS

Avery Stamping Co., The  
Chisholm Steel Shovel Works.

### SHOW CASES

Diamond Show Case Co., The

### SIGNS

A. & W. Electric Sign Co.  
Bellamy, E. E.  
Brazie-Morscher Co.  
Brooklyn Sign Co.  
Bryan Co., The  
DeVries, A. S.  
Hach, Edward A.  
Hall Sign Co.  
Halter & Whittle.  
Herrick Sign Co.  
Higgins Sign Co.  
Kitchener, F. M.  
Lake Shore Advertising Co.  
Lapp, C. W.  
Lindmueller, R.  
Maryland Color Printing Co.  
Metzger Sign Co.  
Nieding Sign Co.  
Oeberman Sign Co.  
Simon Sign Co.  
Snyder, H. M.  
Stockhaus, George F.  
Trentman Sign Service.  
Unsworth, Albert  
Whitell, Thomas H.  
Wilcox, Elmore O.  
Williams Sign Co.

### SILK

Cleveland Art Silk Co.

### SKIRTS

American Suit & Skirt Co.  
Bell Garment Co., The  
Black, H. Co., The  
Cleveland Skirt Co.  
Curtis, Leggett & Co.



**SKIRTS—Continued.**

Dielhenn Mfg. Co.  
 Elite Skirt Co.  
 Falk, Feierstein & Co.  
 Fellenbaum Bros.  
 Freedman & Kornfeld Co.  
 Haller, Hyman  
 Imperial Skirt Co.  
 Klein Co., The  
 Klein, Leibel & Hart.  
 Korach & Ecker Co.  
 Korach, S. & Co.  
 Landesman-Hirschheimer Co., The  
 Lattin, Bloomfield, Co.  
 Lieberman, M. J. & Sons.  
 Monarch Skirt Co.  
 Monash Cloak Co.  
 Novelty Skirt & Suit Co.  
 Paris Skirt Co.  
 Parisian Mfg. Co.  
 Printz-Biederman & Co.  
 Progress Skirt Co.  
 Randall, J. A.  
 Shapera, Abraham  
 Sonnenfield-Bleiweiss Co.  
 Sperber, Herman  
 Sperling & Greenfield.  
 Stahlnecker & Parker.  
 Stein-Hexter Co., The

**SLAG—CRUSHED**

Cleveland Macadam Co., The

**SMELTERS**

Foster Smelting Co.  
 Lake Erie Smelting & Refining Co.  
 Pegg, James

**SOAP MANUFACTURERS**

Buchan Soap Co., The  
 Central Soap Mfg. Co., The  
 Chaser Mfg. Co.  
 Chemical Supply Co.  
 Cleveland Oil Soap Co.  
 Climax Refining Co., The  
 Consumers' Oil Soap Co., The  
 Cuyahoga Rendering & Soap Works, The  
 Davies, James  
 German Chemical Mfg. Co.  
 Masek, C.  
 Pioneer Mfg. Co., The  
 Platt Soap Co.  
 Pompeian Mfg. Co., The  
 Schuh Bros.  
 Stadler, J. L. & H.

**SODA FOUNTAINS**

Bishop & Babcock Co., The  
 Cleveland Faucet Co., The  
 Cleveland Store Fixture Co.  
 Ellsworth Bros. Co., The

**SOFA BEDS**

Leonard Sofa Bed Co.

**SOFT DRINKS**

Cleveland Consolidated Bottling Co.  
 Cleveland Fruit Juice Co.  
 Coco-Cola Bottling Co.  
 Crown Ginger Beer Co.  
 Ellsworth Bros. Co.  
 Diamond Mineral Water Co.

**SPECIALTIES**

Pioneer Mfg. Co., The

**SPRING MANUFACTURERS**

American Steel & Wire Co.  
 Champion Bed Spring Co.  
 Cleveland Wire Spring Co., The  
 Cooper, George & Co.  
 Cuyahoga Spring Works.  
 Forest City Spring Works.  
 Ohio Spring Bed Co.  
 Perfection Spring Co., The  
 Smith, G. B.

**STAFF MAKERS**

McNulty Bros.

**STAMPERS OF METALS AND DIE MAKERS**

American Can Co.  
 Automatic Stamping Machine Co.  
 Avery Stamping Co.  
 Beatty Stamping Co., The  
 Burr Mfg. Co., The  
 Cleveland Metal Stamping Co.  
 Cleveland Stamping & Tool Co., The  
 Cleveland Steel Stamp Works.  
 Cleveland Steel Tool Co.  
 Columbia Metal Stamping Co.  
 Fanner Mfg. Co., The  
 Globe Machine & Stamping Co., The  
 Hart Mfg. Co.  
 Hull Can Co., The  
 Hunt & Dorman Mfg. Co., The  
 Jones, Joseph F.  
 Konigslow, E.  
 Konigslow, Otto Mfg. Co.  
 Mannen & Esterly Co.  
 Parish & Bingham Co., The  
 Pearce, Albert E.  
 Pritchard Novelty & Mfg. Co.  
 Sackman, F. A.

**STAVE AND BARREL MACHINES**

Benson, A. M., Co.  
 Oram, John S.

**STEAM AUTOMOBILES**

White Co., The

**STEAM FITTERS' SUPPLIES**

Chafer Co., The  
 National Mfg. Co., The  
 Republic Belting Co., The  
 Squires, C. E., Co., The

### STEAM SPECIALTIES

Ohio Blower Co., The

### STEAM TRAPS

Anderson Co., The V. D.

Strong, Carlisle & Hammond Co., The

### STEEL BOXES, BARRELS, CANS

Cleveland Wire Spring Co., The

### STEEL DIE EMBOSSERS

Trade Engraving Co.

### STEEL OFFICE FURNITURE

Van Dorn Iron Works Co., The

### STEEL RIMS AND RINGS

Standard Welding Co., The

### STEEL SHAFT ENDS

Steel Socket Shaft End Co., The

### STEEL SHINGLE BANDS

Paton, J., & Co.

### STEEL SOCKET SHAFTS

Steel Socket Shaft End Co., The

Trimmer, R. F.

### STEEL STAMPS AND STENCILS

Alderson, C. L.

Beattie & Son.

Chandler & Fisher.

Cleveland Steel Stamp Works.

Dickey, A. H.

Flehart, J. H. & Co.

Taylor Bros.

### STEREOPTICONS

Buckeye Stereopticon Co., The

Edmondson Co., The

Lake Shore Film & Supply Co., The

Patton Mfg. Co., The H. F.

### STOKERS

Brightman Furnace Co.

### STONE—ARTIFICIAL

Acme Cement Stone Co., The

Byer Concrete Stone Co.

Cleveland Concrete Building Block Co.

Cuyahoga Concrete Stone Co., The

Rackle & Sons Co., The George

Renker Cement Stone Co.

Standard Construction Co.

### STORE FIXTURES

Buckeye Fixture Co., The

Cleveland Store Fixture Co., The

Diamond Show Case Co., The

Koehler & Davis.

Pollard, F.

### STOVES AND RANGES

American Range & Foundry Co., The

Born Steel Range Co., The

Champion Steel Range Co., The

Cleveland Co-Operative Stove Co., The

Cleveland Foundry Co., The

Cleveland Round Stove Mfg. Co., The

Cleveland Steel Range Co.

Cleveland Stove Trimmings Co.

Dangler Stove Co.

Economy Stove Co.

Imperial Steel Range Co.

Pearl Stove Company.

Prince-Stokoe Oil Stove Co.

Republic Stove & Mfg. Co., The

Schneider & Trenkamp Co., The

Standard Lighting Co.

Standard Oil Co., The

Taylor & Boggis Foundry Co., The

Tinnerman Steel Range Co., The

### STRUCTURAL STEEL AND IRON

Forest City Steel & Iron Co., The

National Iron & Wire Co., The

Van Dorn Iron Works Co., The

### SUSPENDERS

Forest City Suspender Co., The

### TACKLE BLOCKS

Cleveland Block Co., The

### TACKS

American Steel & Wire Co.

Bishop & Babcock Co., The

Cleveland Tack Works.

H. C. Tack Co.

Kirk-Latty Mfg. Co., The

National Screw & Tack Co., The

Standard Galvanizing & Tack Mfg. Co.

### TAILORS' TRIMMINGS

Frankel, Philip M.

Greenberg & Goldman.

Hexter, K. W., & Co.

Hexter Lining Co.

Hexter, S. M., & Co.

Hyde, A. G., & Sons.

Overbeke Bros.

Wertheim, M. G., & Co.

Western Reserve Woolen Co., The

### TANNERIES

Cleveland Tanning Co., The

Kroehle's Sons Co., The Adam

### TAPS

Cleveland Twist Drill Co., The

Standard Tool Co., The

### TELEGRAPH INSTRUMENTS

Mecograph Co.

### TELEPHONES

Cleveland Telephone Co., The

Cuyahoga Telephone Co.

## TELEPHONES AND SUPPLIES

National Telephone Supply Co.  
North Electric Co., The

## TERRA COTTA

Ludowici-Celadon Co.

## TERRAZO

Cleveland Mosaic & Marble Co., The

## TEXTILES

Cleveland Worsted Mills Co., The

## TICKETS

National Ticket Co., The

## TIE BUCKLES

Balling Tie Buckle Co., The

## TIN, COPPER AND SHEET METAL

B. & D. Sheet Metal Works.  
Berger Mfg. Co., The  
Bringman Bros.  
Buell & Frantz.  
Callaghan, J. & Son.  
Cleveland Elbow Co.  
Cleveland Galvanizing Works Co., The  
Cleveland Metal Roofing & Ceiling Co.  
Cleveland Sheet Metal Works.  
Complete Mfg. Co.  
Draper Mfg. Co.  
Forest City Heating & Supply Co., The  
Franke, H., Steel Range Co.  
French, Walter T.  
Fuerst, J. E., & Co.  
Globe Machine & Stamping Co., The  
Grant, Jesse  
Halter, Jacob  
Harrison Bros.  
Holz, Theo.  
Hunt & Dorman Mfg. Co., The  
Hussey, Philip B.  
Kain & Tack.  
Kinsner, J.  
Korner, C. J., & Co.  
Lake View Tin & Furnace Co.  
Mannen & Esterly Co.  
Matheis Bros.  
Mitchell, G. F., & Son  
Moore, Albert  
National Cornice & Ceiling Co.  
O'Donnell Safety System Co., The  
Ohio Roofing Co., The  
Orkin Bros.  
Ortli, Chas. F.  
Parks, A. V.  
Paul, Richard  
Reese, August F.  
Riester & Thesmacher Co., The  
Rudolph & Son, Co.  
Sanders, N.

Sheahan, M. W., & Sons  
Sheriff & Weigel.  
Sommers, Chas. A.  
Soros, Albert  
Southwell, Fred H.  
Standard Galvanizing & Tack Mfg. Co.  
Stran, C. W.  
Trinkner, C.  
Uhl, Wm.  
West Side Sheet Metal Works.  
Wiese, F. A.  
Wilke, Wm.

## TIN PLATE

Osborn, J. M. & L. A., Co., The

## TIRE INFLATING OUTFITS

Lennox Chemical Co., The

## TOBACCO

Albert, Gregor  
Birnbaum, Max  
Blue Bell Tobacco Co.  
Burk, John H.  
Burnstein Bros.  
Canda, John A.  
Conrad, James J.  
Cuban Tobacco Co.  
Cuyahoga Tobacco Co.  
Desberg, Dan  
Dluhopolcek, John  
Einfrank, Joseph  
Ellsasser, Geo. W.  
Faulhaber, Frank J.  
Feder Bros.  
Feder, The Marcus, Cigar Co.  
Federman, Fred M.  
Feger, Julius  
Friedman, M. & Co.  
Glickman, Harry  
Greco, John  
Grossman, Charles  
Hajek, Anton  
Hodous, James J.  
Holliger, Jacob H.  
Jaffa, Sarah  
Kirchendorfer, P. J.  
Klein, Jacob  
Koklanner, A. H.  
Kolb, Henry  
Kolcun, Lizzie  
Koplan, Abraham  
Krowarz, Paul  
Lange, Henry  
Lewin, Louis  
Lieblinger, Frank  
Lindeman, Chas. J.  
Lindmueller, Geo.  
Mandelbaum, Henry J.  
Mason Tobacco Co.  
Mayer, Oscar

**TOBACCO—Continued.**

Metzel, Simon  
 Meyer Jaskulek & Co.  
 Mills, Rollin H.  
 Newman, Leopold  
 Ohio Tobacco Co.  
 Papurt Tobacco Co.  
 Pearl Tobacco Co.  
 Poplowsky, Charles  
 Rieben & Williams.  
 Rogart, Carl  
 Rosenberg, Caspar  
 Roth, Charles  
 Royal Blue Tobacco Co.  
 Sauer, Charles  
 Schmoltz, Keller & Co.  
 Schomer, John C.  
 Schwartz, Kohlman  
 Schwartz, Louis  
 Seidman, Adolph  
 Serrer, H. H.  
 Shagrin, Samuel  
 Shlesinger, H. & Co.  
 Shlesinger, Joseph F.  
 Siegel, Maurice  
 Siegel Tobacco Co., L.  
 Skala, James M.  
 Spitz, Jack  
 Stedronsky, Wm. C.  
 Sulzman, John M.  
 Trottnner, S. & Co.  
 Victor Tobacco Co.  
 Warnicke, W. J.  
 Weiss, Isidor  
 Wetesnik, Frank  
 Wolf, James E.  
 Zimmerman, Joseph

**TOILET SUPPLIES**

Bu-te-la Mfg. Co., The  
 Goldberg Specialties Co., The  
 Haines Toilet & Medical Co.  
 Kalso Mfg. Co.  
 Pompeian Mfg. Co., The  
 Royce Co., The Abner

**TOOL MANUFACTURERS**

Bomgardner Mfg. Co.  
 Burke Machinery Co., The  
 Chicago Pneumatic Tool Co.  
 Cleveland Machine Knife Co., The  
 Cleveland Machine & Mfg. Co.  
 Cleveland Pneumatic Tool Co., The  
 Cleveland Stamping & Tool Co.  
 Cleveland Steel Tool Co.  
 Cleveland Tool & Supply Co., The  
 Cleveland Twist Drill Co., The  
 Dyson, Joseph & Son.  
 Foote-Burt Co., The  
 Gardner Electric Drill & Machinery Co., The  
 Gerlach, Peter, Co., The

Globe Machine & Stamping Co., The  
 Hart Mfg. Co., The  
 Ideal Tool & Specialty Works.  
 Johaneck, Frank  
 Konigslow, E., Stamping & Tool Works.  
 Konigslow, Otto, Mfg. Co.  
 Lucas Machine Tool Co.  
 National Tool Co., The  
 Oster Mfg. Co., The  
 Peck, Stow & Wilcox Co.  
 Petrash, A. C.  
 Standard Tool Co., The  
 Strong, Carlisle & Hammond Co., The  
 Ulmer, J. C., Co., The  
 Vlchek Tool Mfg. Co., The  
 Warner & Swasey Co., The  
 White Tool & Supply Co., The  
 Worden Tool Co.

**TOYS**

Cleveland Toy Mfg. Co., The

**TRUNKS, VALISES AND TRAVELERS' SUPPLIES**

Cleveland Leather Goods Co., The  
 Cleveland Trunk Co.  
 Englehart Trunk Co.  
 Faber, J.  
 Feigenbaum Trunk Co., The  
 Hubbard, L. D., & Co.  
 Likly & Rockett Trunk Co., The  
 Ohio Trunk Co., The

**TRUSSES AND SURGICAL GOODS**

Burton, D. F.  
 Walsh, C. S.

**TUBEING**

Standard Welding Co., The

**TUMBLING BARRELS**

Cleveland Nickel Works.  
 Globe Machine & Stamping Co., The

**TURNED MOULDINGS**

Taft, C. E. & Co.

**TURNSTILES AND TICKET CANCELING MACHINES**

Bright, H. V.

**TURRET MACHINES**

Bardons & Oliver.

**TWINE HOLDERS**

Star Specialty Co.

**TYPEWRITERS AND SUPPLIES**

Buckeye Ribbon & Carbon Co.  
 Foyer, Chas. A., & Co.  
 Straus, Hiram & Co.

## UMBRELLAS AND CANES

Becker & Thomas Co., The  
Kohn, Meyer J.  
Lemmers Umbrella Co.  
Lowe, John C.  
National Umbrella Co.  
Neitzel, J. A.  
Sommer, Edward H.  
Standard Umbrella Mfg. Co.

## UNDERTAKERS' SUPPLIES

Cleveland Burial Case Co., The  
Bomgardner Mfg. Co.

## UNDERWEAR

Blitz, B. J.

## UNIFORMS

Block Co., The  
Grossman Military & Society Supply Co.

## UPHOLSTERERS

Foster, William  
Furstenau, E. C.  
Hach, J. H.  
Haystead, A. T.  
Janssen, Loeblein & Cleveland Couch Co.  
Spitz, A. & Co.  
Vonhof, Joseph  
Voss, Louis

## VACUUM CLEANERS

Domestic Vacuum Cleaner Co.

## VALVES

Chappel, R. J. Co., The

## VARNISH

Bilings-Chapin Co., The  
Forest City Paint & Varnish Co., The  
Glidden Varnish Co., The  
Ohio Varnish Co., The  
Sherwin-Williams Co., The

## VARNISH STAIN

Moore, Benjamin Co.

## VENEERS

Martin-Barriss Co., The

## VESTLETTES

Bellamy Vestlette Mfg. Co., The

## VESTS

Novelty Waistcoat Co.

## VIBRATORS—ELECTRIC

Standard Specialty Co.

## VIOLINS

Wood, J.  
Lee, Erskine

## WALL PAPER

Bailey Wall Paper Co., The

## WALL PAPER CLEANERS

Climax Cleaner Mfg. Co.  
Gilbert, Frank  
Jaeckles Mfg. Co.  
Lightning Cleanser Co.  
Ohio Steam Paste Co.  
Thauvette, Charles D.

## WASHBOARDS

Cleveland Washboard Co., The

## WASHING COMPOUND

Lightning Cleanser Co.  
Snow White Mfg. Co.  
Sunoleum Co.

## WASHING MACHINES

Peerless Power Washer Co.

## WATCHES

Ball Watch Co., The Webb C.

## WATERPROOF CLOTHING

Ohio Rubber Co., The

## WEATHER STRIPS

All Right Metal Weather Strip Co., The  
Pennington Metal Weather Strip Co.

## WEAVERS

Cleveland Worsted Mills Co., The

## WHEEL GOODS

Kirk-Latty Mfg. Co., The

## WINDOW CLEANERS

Kiefer Carpet Cleaning & Rug Co.

## WIRE CLOTH

Tyler Co., The W. S.

## WIRE DIES

Waldeck, A.

## WIRE FENCE

Cyclone Woven Wire Fence Co.  
Eagle Wire Works.  
Sheer Bros. Fence & Iron Co., The  
Sheer, Geo. D., Iron Works, The

## WIRE ROPE CLAMPS

Lamson & Sessions Co., The

## WIRE SCREENS

Eagle Wire Works.  
Tyler Co., The W. S.

## WIRE AND WIRE SPECIALTIES

American Steel & Wire Co.  
Anchor Fence & Mfg. Co., The  
Brown Fence & Wire Co., The  
Buckeye Fixture Co., The  
Cleveland Art Metal Co.,  
Cleveland Wire Goods Co., The  
Cleveland Wire Spring Co., The  
Cyclone Woven Wire Fence Co., The  
Eagle Wire Works.  
Forest City Hat Frame Co.  
Forest City Steel & Iron Co., The  
Kirchner's Iron Wire & Bronze Works.  
Lindsay Wire Weaving Co., The  
Malin & Co., The  
National Iron & Wire Co., The  
O'Donnell Safety System Co., The  
Ohio Bale Tie Co.  
Ohio Bed Spring Co., The  
Sheer Bros. Fence & Iron Co., The  
Sheer, George D., Iron Works, The  
Trebing Mfg. Co., The  
Tyler, W. S., Co., The  
Union Wire & Iron Co.  
Upson-Walton Co., The  
Van Dorn Iron Works Co., The  
Zeman Iron Works Co., The

## WOOD

Berkshire Mfg. Co., The  
Cleveland Grille & Mfg. Co.  
Cleveland Hardwood Floor Co.  
Cleveland Window Glass & Door Co.  
Cummings Bros.  
Diamond Glass Co., The  
Hubbard, Lyle  
Humphrey, J. D.  
Kennelly, T. J. Co.  
McCullough Mill & Lumber Co., The  
Marquard Sash & Door Mfg. Co.  
Martin-Barriss Co., The  
Monaghan, Marcus A.  
Nicola, Stone & Myers Co., The  
Ohio Moulding & Mfg. Co., The  
Ohio Sash & Door Co., The  
Ohio Wood Turning Co.  
Opatry, Joseph  
Osborne & Flinkers.  
Peters Mill Work & Lumber Co., The  
Pfeil, Chas. J., Co.  
Pierce Parquet Floor Co.  
Roediger, Wm. A.  
Royce & Hulse Lumber Co.  
Schellentrager, L. F.  
Schmitt, J. F.  
Schulkins & Co.  
Taft, C. E. & Co.  
Trebing Mfg. Co.  
Van Luit, Christopher

Wiggins, F. B.  
Wobecky, Jos.  
Wooden Lumber & Mfg. Co., The  
Zimmerman, F., Co., The

## WOOD CARVING AND TURNING

Humphrey, J. D.  
Hyle, Philip  
Schellentrager, L. F.  
Taft, C. E. & Co.

## WOOD ENGRAVING

Eclipse Electrotype & Engraving Co., The

## WOOD HANDLES

National Handle Co., The

## WOOD INTERIORS

Pfeil, Chas. J. Co.

## WOOL DUSTERS

Bohm, N. & Co.  
Goodsell, E. S. & Co.  
Pioneer Mfg. Co.

## WOOLEN GOODS

Acme Woolen Mill Co.  
Beckman Co., The  
Cleveland Worsted Mills Co., The  
Collings, Taylor & Co.  
Forest City Woolen Mill Co.  
National Woolen Co., The

## WOVEN WIRE MATTRESSES

Ohio Spring Bed Co., The

## WRENCHES

Lamson & Sessions Co., The

## WRINGERS

Griffith, W. J.  
Kohl-Roll Co.  
Lavelle & Gunning.

## WROUGHT WASHERS

Cleveland Wrought Washer Co., The

## X-RAY APPARATUS

Electric Therapeutic Appliance Co.  
Engeln & Co.

## YEAST

Buckeye Compressed Yeast Co.  
Renck, Charles  
Vienna Pressed Yeast Co.









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